A Guide To Using

Virtual Merchant

THIS VIRTUAL MERCHANT USER'S GUIDE
WILL FAMILIARIZE YOU WITH ALL THE TRANSACTION
TYPES AND PROCEDURES YOU WILL USE. PLEASE TAKE SOME
TIME TO THOROUGHLY REVIEW THIS MATERIAL

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The most reliable payment processing network in the industry

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Virtual Merchant

Overview

Virtual Merchant is your single-source, online terminal and payment solution. Virtual Merchant can do everything from online payment processing to transaction management, while offering a secure Internet payment gateway solution for traditional Retail, MO/TO and Internet Merchants. Virtual Merchant can accept Credit Card, Debit Card, Electronic Benefit Transactions (Food Stamp and Cash Benefits), Electronic Check Transactions, and Electronic Gift Certificate Transactions. These transactions are sent encrypted to the Host via the Internet and are interleaved for superior transaction response times.

Virtual Merchant supports card present processing for retail environments, card-not-present processing for MO/TO environments and supports the Electronic Commerce Indicators (ECI) for consumer-initiated transactions on the Internet.

Virtual Merchant allows you to set up multiple users with unique login information under your Virtual Merchant ID. This feature allows you to grant or restrict levels of access for proficiency and accountability, as well as permitting multiple users to work simultaneously.

The Virtual Merchant system is a secure server-based transaction processing system that will enable your business to authorize and process transactions in real-time.

The information needed to process the transactions is sent over a secure, encrypted Internet connection. At its most basic level, your terminal submits your customer's transaction information to the Virtual Merchant server.

The Virtual Merchant server connects with the NOVA Network for payment authorization and, if the sale is authorized, the program prints or returns a receipt for the customer. E-mails, to confirm the order, can be sent to Internet customers and the merchant as notification of a new sale.

To finalize the sale, fulfill the order and login to our server to select it for payment processing. NOVA settles the transaction and deposits the funds into your bank account. Virtual Merchant automatically archives sales that are finalized so that you can refer to them at a later date.

The Virtual Merchant program is easy to integrate with other payment systems. For more information on integration, please call **1-800-377-3962** and ask us for the Virtual Merchant Developer's Guide or visit our support site at https://www.myvirtualmerchant.com/VirtualMerchant/supportlandingvisitor.do

Features and Benefits

Credit Card Processing – Supports processing for all major types of Credit Cards.

Debit Card Processing – Supports processing for Debit/ATM PIN based transactions. Terminals set up for Internet and MOTO transactions can be configured to accept Pinless Debit.

Electronic Benefit Transaction Processing – Supports processing for Food Stamp and Cash Benefit Transactions.

Electronic Check Processing – Supports processing for Electronic Check Transactions for Point-of-Purchase (POP) and Accounts Receivable Conversion (ARC) processing.

Electronic Gift Card Processing – Allows you to extend more payment choices to your customers while adding value to your business. Gift cards enable you to expand your market, increase revenue, and build customer loyalty, all with electronic efficiency.

Dynamic Currency Conversion (DCC) – International Visa and MasterCard Credit Card purchases can be converted instantly, at the point of sale, to the cardholder's home currency, at a very competitive exchange rate – eliminating unpleasant surprises for consumers when their Credit Card bill arrives.

Market Segments – Supports processing for the Internet, Retail, and MO/TO environments.

Superior Transaction Speeds – Uses the Internet to deliver superior transaction response times.

Multi-Entry Transactions – The Multi-Entry Transaction option allows you to key in multiple transactions and submit them together for authorization.

Multi-Merchant Processing – Supports multiple merchant accounts.

Multi-User Capable - Supports a hierarchical user structure for increased user security.

Enhanced User Rights – Allow you to manage each user's access to selected features within the application. Access to these features can be granted or denied at an individual user level.

HTTPS Authorization Interface – A SSL interface to process consumer initiated transactions is available for payment integration.

Customizable Payment Forms – The online payment and Virtual Terminal Payment forms can be configured to your unique business needs.

Auto Settlement – The program can be configured to automatically settle unpended transactions.

Business Rules – This section allows you to set up a list of authorization rules to perform some action on the transaction, such as mark the record for review or send an email. This is only available for terminal-based processing.

Purchasing Card/Business Card Capable – Prompts for customer code and sales tax information to meet Level Two processing requirements.

CVV2 Processing – Meets current Card Verification Value 2 (CVV2, CVC2, and CID) requirements for Card-Not-Present (CNP) transactions.

Address Verification (AVS) Processing – Used to comply with Visa and MasterCard direct marketing requirements and to minimize fraudulent Internet and mail order/telephone order transactions.

Batch Export Options – The program supports a tab or comma delimited export process for currently open and previously settled batches.

Peripheral Printing Capable – The program supports receipt printing to peripheral printers. Receipts support card account and expiration date truncation on consumer receipts.

Custom Decline Messages – This option allows you to customize "non-approved" authorization responses for consumer initiated transactions.

Compatible Carts Section – This section provides an alphabetical listing of shopping cart manufactures that have coded to the Virtual Merchant program.

User-Defined Fields – The program has the ability to support additional user-defined transaction prompts on all payment forms.

Virtual Merchant Configuration Initial Login

To access Virtual Merchant for the first time:

- 1. Open an Internet browser on a computer connected to the Internet.
- 2. Enter the following URL in the address box: https://www.myvirtualmerchant.com.
- 3. Select the Client Login link to access the login page.



At the Virtual Merchant Login screen, enter your **Account ID**, **User ID** and **Password** then select the Login button. You will receive login information upon setting up your Virtual Merchant account.

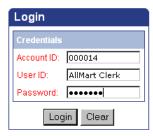
Virtual Merchant

Copyright © 2006 Nova Information Systems. All rights reserved. Attention: Important VirtualMerchant Information

welcome to Virtual Merchant.....

User Login

Enter your user name and password information.



If you don't know your Account ID or your Password, feel free to contact us at: 1-800-377-3962 and we'll be happy to help you.

Password Instructions

Each user's case-sensitive password must meet the following criteria

- The password must be a minimum of seven (7) characters in length.
- The password must be an alpha-numeric value containing at least one letter and one number
- The password must be changed at a minimum of every forty-five (45) days.
- The previous thirteen (13) passwords cannot be reused.

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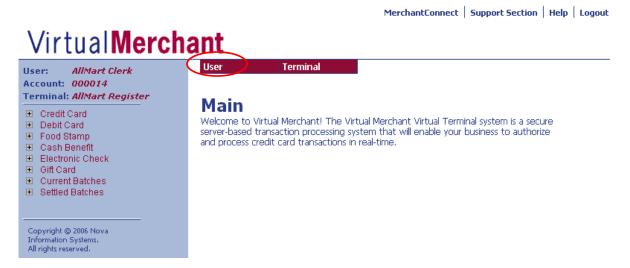
On your initial login, as the **Merchant Administrator**, your Account ID and User ID will be the same. The **Merchant Administrator** account holds domain over your entire account. The **Merchant Administrator** can create multiple users who can login and process transactions simultaneously. The **Merchant Administrator** can create a hierarchy of users, with similar or varying degrees of permissions and access, and can even delegate the ability to manage the hierarchy of users to another user. This serves to help you better manage efficiency, as well as creating a system of accountability.

Account inactivity for more than ten minutes will automatically log you out. If your User account is accessed from another browser while you are logged in, you will be logged out, as Virtual Merchant only allows one concurrent login per user.

If you have problems accessing the Virtual Merchant program, call **1-800-377-3962** for assistance in accessing your account.

User

The **User** section allows you to manage the users for each Account. This section provides access to the permissions and terminal associations for users. The **Find/Edit User** option allows the currently logged in user to locate each subordinate or peer user and access and edit information about them. The **Change Password** and **Change PIN** function allows the currently logged in user to change their password or PIN.



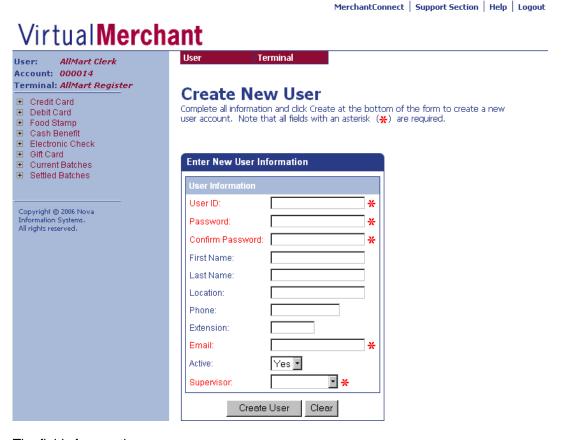
The options available under **User**:



- Find/Edit Allows the currently logged in user to manage all of their subordinate users and peers.
- Create New Allows the currently logged in user to add new users to their account.
- Change Password Allows the currently logged in user to change their password.
- Change PIN Allows the currently logged in user to change the terminal PIN(s) associated with their account.

Create New User

The **Create New User** section is used to add new users to the Virtual Merchant account. Each new user's information can be entered into the **Create New User** form. To create a new user, enter a **User ID** and a **Password**. For verification purposes, the new password must be re-entered into the **Confirm Password** field for validation. The new **Password** must have alphanumeric fluctuation with a minimum of seven (7) characters.



The fields for creating a new user are:

- User ID Enter a name for this User ID. This is a required field.
- Password Enter a password for this User ID. This required field is case sensitive.
- Confirm Password Re-enter the password for this User ID. This required field is case sensitive.
- First Name Enter the user's first name.
- Last Name Enter the user's last name.
- Location Enter the user's location.
- **Phone** Enter the user's phone number.
- Extension Enter the user's phone extension.
- Email Enter the user's Email address. This is a required field.
- Active Select Yes or No from the drop-down menu.
- **Supervisor** Select the appropriate supervisor for the user. This is a required field.

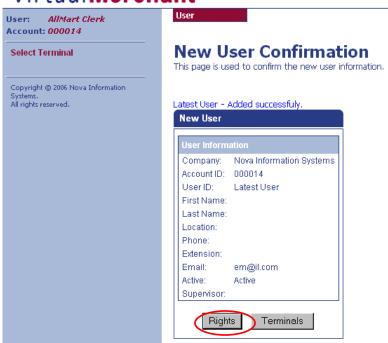
When creating a new User, you must select a **Supervisor** from the drop-down menu, which is populated with the user hierarchy for your account as you create more users. The default **Supervisor** is the current user's supervisor or the Merchant Administrator if the user logged in is the Merchant Administrator. See **Appendix C**, **Merchant User Administration Strategies**

Select the Create User button to add the new user, or select Clear to abandon the new user creation.

New User Confirmation Page

The **New User Confirmation** page displays the fields that were entered on the **Create User** page. This page allows the user to set up the new user's terminal associations, as well as rights to the tasks the new user has access to within the program.

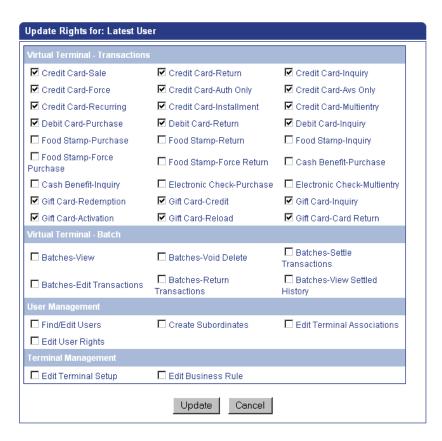
Virtual Merchant



Edit Terminal Rights

The **Rights** button launches the **Update Rights** page which allows you to specify the permissions and access for the selected user.

The user rights that display in the **Update Rights** window are dependant upon the user rights of the currently logged in user. **A user cannot grant a right to a subordinate that they themselves do not have access**.



To add the right to the currently selected user, select the checkbox to the left of each field.

Once all of the rights have been selected for the user, select the **Update** button to enact the selected rights, or select the **Cancel** button to abandon any changes.

<u>Virtual Merchant - Transactions</u>

- Credit Card-Sale Provides access to the Credit Card-Sale Transaction option.
- Credit Card-Return Provides access to the Credit Card-Return Transaction option.
- Credit Card-Inquiry Provides access to the Credit Card-Inquiry Transaction option.
- Credit Card-Force Provides access to the Credit Card-Force Transaction option.
- Credit Card-Auth Only Provides access to the Credit Card-Auth Only Transaction option.
- Credit Card-AVS Only Provides access to the Credit Card-AVS Only Transaction option.
- Credit Card-Recurring Provides access to the Credit Card-Recurring Transaction option.
- Credit Card-Installment Provides access to the Credit Card-Installment Transaction option.
- Credit Card-Multientry Provides access to the Credit Card-Multientry Transaction option.
- Debit Card-Purchase Provides access to the Debit Card-Purchase Transaction option and allows pinless debit and access for MO/TO and Internet transactions.
- Debit Card-Return Provides access to the Debit Card-Return Transaction option.
- Debit Card-Inquiry Provides access to the Debit Card-Inquiry Transaction.
- Food Stamp-Purchase Provides access to the Food Stamp-Purchase Transaction option.
- Food Stamp-Return Provides access to the Food Stamp-Return Transaction option.
- Food Stamp-Inquiry Provides access to the Food Stamp-Inquiry Transaction section.
- Food Stamp- Force Purchase Provides access to the Food Stamp- Force Purchase Transaction option.
- Food Stamp-Force Return Provides access to the Food Stamp-Force Return Transaction option.

- Cash Benefit-Purchase Provides access to the Cash Benefit-Purchase Transaction option.
- Cash Benefit-Inquiry Provides access to the Cash Benefit-Inquiry Transaction Options.
- Electronic Check-Purchase Provides access to Electronic Check-Purchase Transaction option.
- Electronic Check-Multientry Provides access to Electronic Check-Multientry Transaction option.
- Gift Card-Redemption Provides access to Gift Card-Redemption Transaction option.
- Gift Card-Credit Provides access to the Gift Card-Credit Transaction option.
- Gift Card-Inquiry Provides access to Gift Card-Inquiry Transaction option.
- **Gift Card-Reload** Provides access to **Gift Card-Reload** Transaction option.
- Gift Card-Activation Provides access to Gift Card-Activation Transactions option.
- Gift Card-Card Return Provides access to Gift Card-Return Transaction option.

Virtual Merchant – Batch

- Batches View Allows you to view the unsettled transactions in the Current Batches section.
- Batches Void Delete Allows access to the Void and Delete buttons in Current Batches section. Void
 is both Host and Terminal-based. Delete is Terminal-based only.
 - Void can be used to void Credit Card transactions
 - Void can be used to send reversal ECS transactions from Host-based accounts.
 - Unvoid can be used to reverse a transaction voided from Terminal-based accounts.
 - Delete can be used to delete transactions from Terminal-based accounts.
 - Pend can be used to pend transactions from Terminal-based accounts.
 - Unpend can be used to unpend a transaction from Terminal-based accounts.
- Batches Settle Transactions Allows access to the Settle button in the Current Batches section to settle selected transactions.
- Batches Edit Transactions Allows access to the Batches-Edit Transaction option.
- Batches Return Transactions Allows access to initiate a return from a Settled Credit Card Transaction in the Settled Batches menu.
- Batches View Settled History Allows access to the Settled Batches section.

User Management

- Find/Edit User Allows access to the Find/Edit User section.
- Create Subordinates Allows access to the Create User section.
- Edit Terminal Associations Allows access to Terminal Associations section.
- Edit User Rights Allows access to the Edit Rights section under the Find/Edit User section.

Terminal Management

- Edit Terminal Setup Allows access to the Terminal Setup section.
- Edit Business Rule Allows access to the Business Rule section.

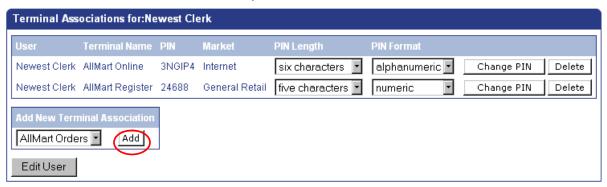
Edit Terminal Associations

When adding a new user you can specify the terminals to which the user's login has access through the **Terminal Associations** screen.

Virtual Merchant



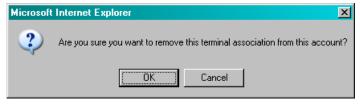
To associate a terminal with the new user, select the **Terminals** button.



From the **Terminal Associations** screen, select a terminal from the **Add New Terminal Association** drop-down menu and select the **Add** button.

When you select the **Add** button, the screen updates to show the terminal association. To associate another terminal with the user, select the terminal from the drop-down menu and select the **Add** button again. If the **Add New Terminal Association** box does not display, then there are no more terminal associations available for the selected user.

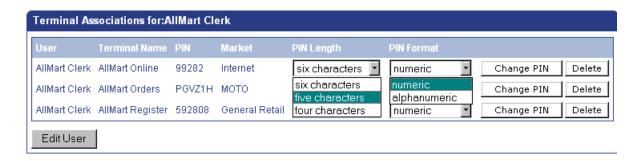
To remove a terminal association for the currently selected user, select the **Delete** button. You will be prompted to confirm this action.



Select the OK button to confirm that you would like to remove the terminal association or Cancel to retain it.

Changing the PIN Format

To change a terminal PIN for the selected user, there are two drop-down menu options.



PIN Length - To change the PIN length, select one of the three options from the drop-down menu:

- six characters
- five characters
- four characters

PIN Format – To change the PIN format, select one of the two options from the drop-down menu:

- numeric
- alphanumeric

Select the desired length and/or format from the drop-down menus. Select the **Change PIN** button, the PIN value changes based on your selection.

You can access the **Edit User** screen to modify information for the currently loaded user by selecting the **Edit User** button at the bottom of the **Terminal Associations** screen. For more information about editing user information, refer to the Edit User information in the **Find/Edit User** section of this guide.

Find/Edit User

This section allows you to locate and manage all User IDs for your account. The **Find/Edit User** page allows you to locate users utilizing four search fields. You can specify the number of records shown at a time using the **Display** option.

Each field is partial-search capable, meaning you can search fields using only the first letter or first few letters of your search criteria. The search is not case sensitive. You can search using a single field or multiple fields to narrow your search. Enter the information in the search field(s) and select the **Find** button. Selecting the **Find** button without defining search criteria will display all of the current User's peers and subordinates.

The Find/Edit User option is a user right that can be enabled or disabled for each user accessing the system.



The four search criteria fields are:

- User ID Searches for all User IDs matching the first characters entered in this field.
- First Name Searches for all First Names matching the first characters entered in this field.
- Last Name Searches for all Last Names matching the first characters entered in this field.
- Active Searches for Active or Inactive users based on the selection.

The **Display** drop-down menu allows you to view Users in increments of 25, 50, 100, or All per screen. This feature allows your browser to work more efficiently, allowing you to view your users faster.

Search Results Table

After a search has been initiated, a table displays all users defined by the search. The **Search Results** table provides the User ID, Company, Account ID, First Name, Last Name, Location, Supervisor, and indicates if the User is Active. The headings allow you to find and access users' accounts quickly. Selecting any of the six column headers will change the sort order of the **Search Results** Table. Select a column header to sort the column in alphabetical order from smallest to largest. Selecting the column header twice will sort the column in reverse alphabetical order.

Virtual Merchant



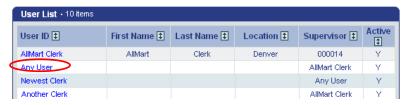
The column headers are:

- **User ID** This column displays the User IDs that match the search criteria. This field is a hyperlink that directs you to that specific user's Edit User page.
- Company This column displays the company of the User IDs that match the search criteria.
- Account ID This column displays the Account ID of the User IDs that match the search criteria.
- First Name This column displays the first name of the User IDs that match the search criteria.
- Last Name This column displays the last name of the User IDs that match the search criteria.
- Location This column displays the location of the User IDs that match the search criteria.
- Supervisor This column displays the supervisor of the User IDs that match the search criteria.
- Active This column displays the status of the User IDs that match the search criteria. If the User ID is active, the letter 'Y' for 'yes' displays in the column. If the User is inactive, the letter 'N' for 'no' displays in the column.

Edit User

The **Edit User** page allows you access to basic information for a specific user account. You can modify a single field or multiple fields simultaneously.

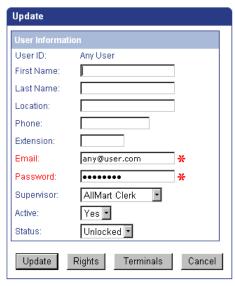
Load the information for the user by selecting the User ID in the **User List** table, the result of performing a user search.



For steps on how to find a Virtual Merchant user, see the Find/Edit User section of this guide.

Edit User

Update an Existing User. Note that all fields with an asterisk $(\c lpha)$ are required.



Make the changes to the selected user and select the **Update** button to save the changes.

The User Fields are:

- User ID Displays the specific User ID for the selected user. This value cannot be edited.
- First Name This field is used to enter or change the user's first name.
- Last Name This field is used to enter or change the user's last name.
- Location This field is used to enter or change the user's location.
- Phone This field is used to enter or change the user's phone number.
- Extension This field is used to enter or change the user's phone extension.
- Email This field is used to enter or change the user's e-mail address. This field is required.
- **Password** This field is used to change the selected user's password. The new password must have alphanumeric fluctuation with a minimum of seven (7) characters and at least one letter and one number. This field is required.
- Supervisor This drop-down field allows you to change the supervisor of the selected user.
- Active This field is used to activate or deactivate the selected User ID.
- Status This drop-down field is used to lock or unlock a user's ability to login.

The **Rights** button allows you to configure the options that this user can access.

The **Terminals** button allows you to add terminal associations to the currently selected user.

Select the **Cancel** button to abandon any changes.

Change Password

This section allows a user to change their password. As a security measure, each user's password is set to expire **45 days** after their last password change. If a user has not changed their password within the last 45 days, they will be prompted to enter a new password upon their next successful login.

Passwords must be alphanumeric with a minimum of seven (7) characters and contain at least one letter and one number. New Passwords must be different from the previous thirteen (13) passwords. Three (3) successive failed login attempts will automatically lock the account. As a security measure, to change your password, you must have already logged in with your old password. If you cannot remember your current password or if your account has been locked, call **1-800-377-3962** for assistance.

To change your password, enter your current password in the **Current Password** field. Then enter the new password you would like to use in the **New Password** field. The newly entered password will need to be entered in a second time in the **Confirm New Password** field for verification. Select the **Change Password** button to complete the password change, or **Clear** to abandon any changes.

Virtual Merchant



The following information is necessary to change your password:

- Enter Password The Current Password is required to change your password.
- Enter New Password Enter the new password.
- Confirm New Password Re-enter the new password.

Terminal Setup

The **Terminal Setup** section is used to configure the environment for the selected Virtual Merchant Terminal ID. This section allows you to define how Virtual Merchant should function based upon your unique options. The payment forms can have their fields and colors modified. The headers and footers of these forms and e-mail messages can be customized with specific text. More advanced features can be enabled or disabled as necessary for your business needs.



The **Terminal Setup** menu allows you to access to these options:

- Merchant
 - Main Modify Basic Merchant information.
 - **Terminal** Update the Friendly Name of the terminal information.
 - Payment Fields Create or modify the fields that appear on payment forms.
 - Printer Set up printing options.



- Payment Form
 - Payment Form Add custom headers to the Virtual Merchant payment form.
 - Receipt Form Identify payment receipt link options.
 - **E-mail Form** Configure Approved and Declined e-mail options.



- Advanced
 - System Setup Setup auto-settlement and define HTTP access.
 - Error Messages Define custom error messages to appear in the Virtual Merchant payment form.
 - Business Rules Define custom rules for terminal-based Internet and MOTO transactions.

Merchant Information

Main

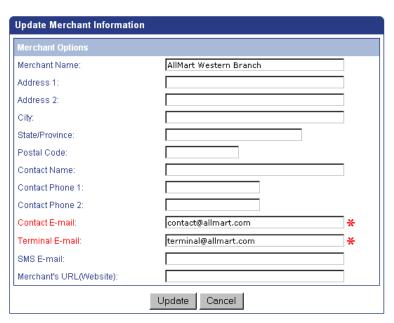
The **Merchant Information** page allows you to view and edit your merchant information for the selected terminal. This information will be used on your receipt. The remaining information is for your internal use only.



To change any field, type in new information and select the **Update** button at the bottom of the table. Select the **Cancel** button if you wish to abandon the changes and retain your original information. Once the **Update** button has been selected, you cannot revert to the old information.

Update

This form is used to update the selected terminal. Note that all fields with an asterisk (*) are required.



The Merchant Information fields are:

- Merchant Name This is the merchant's DBA name.
- Address 1 This is the merchant's primary address.
- Address 2 This field allows you to add additional address information.
- City This is the city in which the merchant's company is located.
- State/Province This is the state or province in which the merchant's company is located.
- Postal Code This is the zip code for the postal area in which the merchant's company is located.
- Contact Name This is the name of the person who is the primary point-of-contact at the merchant's company.
- Contact Phone 1 This is the primary phone number for the merchant's company.
- Contact Phone 2 This is the secondary phone number for the merchant's company.
- Contact E-mail This is the primary point-of-contact e-mail for the merchant's company.
- Terminal E-mail This is the e-mail address for the terminal.
- **SMS E-mail** This is the Short Message Service e-mail address, this is an optional e-mail that can send business rule alerts to mobile devices.

Merchant's URL (Website) – This is the merchant's Website address.

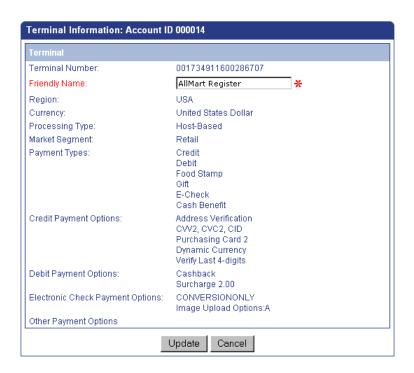
Terminal

The Merchant **Terminal Information** page allows you to view the set up information for the terminal. You can also change the Friendly Name for the terminal.



Update Terminal

This form is used to update the selected Terminal. Note that all fields with an asterisk (**) are required.



To change the **Friendly Name** for the terminal, enter the new friendly name and select the **Update** button.

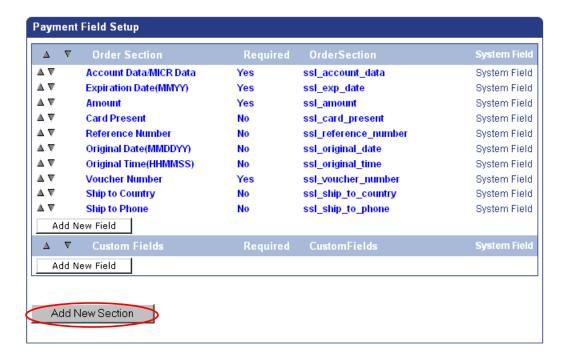
Sections and Payment Fields

The **Payment Field Setup** section provides you with the option to configure how payment forms display in Virtual Terminal and to the customer. The section contains two categories: **Sections** and **Fields**. Sections are placeholders for similar information that that can be configured to display on the payment forms. Each Section is composed of the individual fields that are requested on the payment forms. **Section** names can be changed to reflect any value that is desired.



Payment Fields

This form is used to update the field use and order.



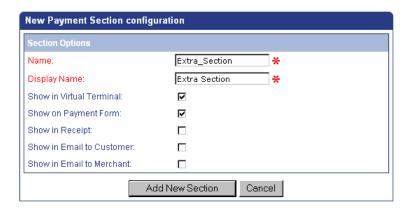
Adding a New Payment Section

To add a new section to the Payment Form, select the **Add New Section** button at the bottom of the **Payment Field Setup** page. The **Add New Payment Section** page displays. On this page, enter the name of the new section, without spaces, in the **Name** field. Enter the **Display Name** for the new section. Select the check boxes to specify where the new section will display.

Select the **Add New Section** button on the **New Payment Section Configuration** to save the new section parameters.

Add New Payment Section

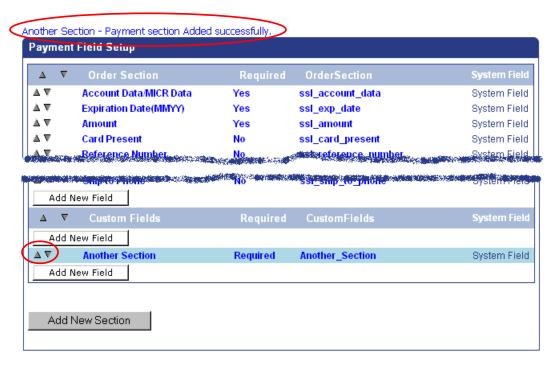
This form is used to add a new payment section. Note that all fields with an asterisk $(\frac{\mathbf{x}}{\mathbf{x}})$ are required.



Once the section information has been updated, a message informs that it has been added successfully and the new section displays at the bottom of the section.

Payment Fields

This form is used to update the field use and order.



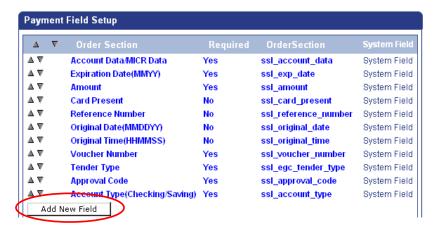
To change the order of the sections, select the up or down Arrows in the title bar of the section.

Adding a New Payment Field

Select the **Add New Field** button at the bottom of the **Payment Field Setup** screen to add a new field to that section on the Payment form.

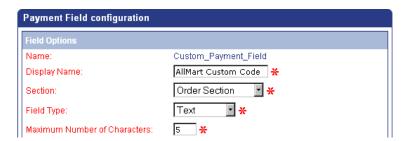
Payment Fields

This form is used to update the field use and order.



Enter the name of the new field, without spaces, in the **Name** field of the **New Payment Field Configuration** form.

Enter the name for the field that will show on the Payment Field form in the Display Name field.



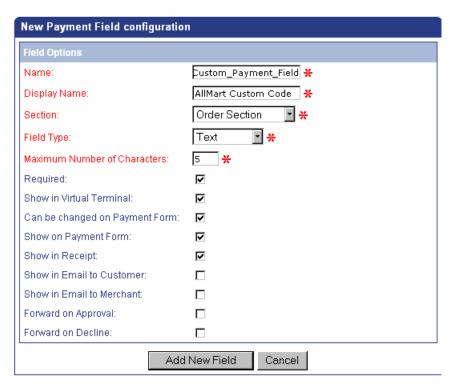
Select from the Section drop-down menu to indicate the section that you want the new field to display.

Select from the Field Type drop-down menu to indicate the kind of field (Text, Drop Down, or Checkbox).

Enter the Maximum Number of Characters accepted by the field.

For Drop-down fields, enter the **Drop Down Values**, separated by colons (:), that will be available for the new drop-down field.

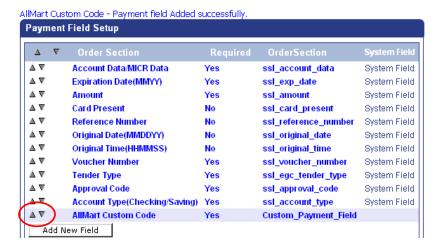




Select the check boxes to specify that the field is required, if it can be changed, and where it will display. Select the **Update** button to save the new field parameters.

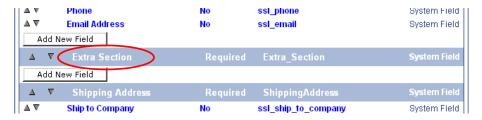
Once the field information has been updated, a message informs that it has been added successfully and the new field displays at the bottom of the section.

To change the order that the fields display in the section, select the up or down Arrows.



Editing a Section

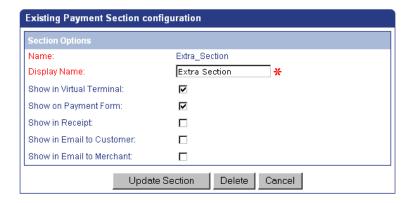
Specify the section to edit by selecting the section name in the header, the **Update Payment Section** screen displays with the current information for the section.



The section options allow you to define how this section is presented on the screens, as well, as the Virtual Merchant Payment form. It also is used to identify whether the section should be used on the e-mail responses to the merchant and consumer.

Update Payment Section

This form is used to update a payment section. Note that all fields with an asterisk (*) are required.



- Name The system name for the section. It can only be edited when adding a new section.
- **Display Name** The name to display on the form.
- Show in Virtual Terminal Specifies whether the section is visible in Virtual Terminal.
- Show on Payment Form Specifies whether the section is visible in the Virtual Merchant payment form.
- Show in Receipt This option will place this section on the transaction receipt.
- Show in Email to customer Includes this section in e-mail to the customer.
- Show in Email to merchant Includes this section in e-mail to the merchant.

Select the **Update Section** button to save the settings for this Section. Use the **Cancel** button to abandon any edits that have been made on the section.

Select the **Delete** button to delete the entire section from your form. If you attempt to delete a section with system fields you will receive and error message stating that you cannot delete the section that contains existing fields.

Edit a Field

To edit a Payment field, from the desired section, select the field name from the Payment Fields screen.

Payment Fields

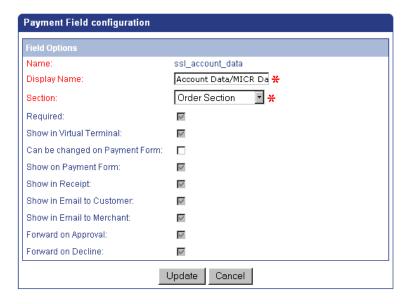
This form is used to update the field use and order.



Once the field has been selected, the **Update Payment Field** screen displays.

Update Payment Field

This form is used to update a payment field.. Note that all fields with an asterisk (**) are required.



This screen allows you to define how the field is presented on both the Virtual Terminal screens and the Virtual Merchant Payment Form. It also is used to identify whether the field should be used on the e-mail resonses for approved and declined notifications.

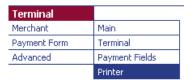
Note: System fields may have limited editing ability.

- Name This displays the system name for the field. It can only be edited when it is a new field addition.
- **Display Name** This is the name of the field that will appear on the payment forms.
- **Section** This feature offers a drop-down menu that allows you to choose the section in which the field will appear on the payment form. The drop-down menu will contain all available Sections.
- Field Type The type of field to be added/edited. The available field types are: Text, Drop Down, and Checkbox.
- Maximum Number of Characters Used to define the maximum number of characters for each field.
- Required This option is used to designate a field as required.
- Show in Virtual Terminal This option is used to make the field visible in the Virtual Terminal.
- Can be Changed on Payment Form This option determines whether the field can be edited on the payment forms. This option will not be valid unless the **Show on Payment Form** option is enabled.

- Show on Payment Form This option is used to make the field visible in the Virtual Merchant payment form.
- Show in Receipt This option will place this field on the transaction receipt.
- Show in Email to Customer This option includes this field in the customer e-mail to the addresses entered into the payment form. The Email Address must be a required field in the Payment Field Setup section for the e-mail to be sent to the consumer.
- Show in Email to Merchant This option includes this field in the merchant notification e-mail to the addresses entered into the Terminal E-mail field under the Merchant Information section.
- **Forward on Approval** This option will forward the information in this field in the customer or merchant e-mail if the transaction is approved.
- **Forward on Decline** This option will forward the information in this field in the customer or merchant email if the transaction is declined.

Select the **Update** button to save the settings for this field. Use the **Cancel** option to abandon any edits that have been made on the field. For fields that have been added to the system, a **Delete** button will also display. System fields cannot be deleted.

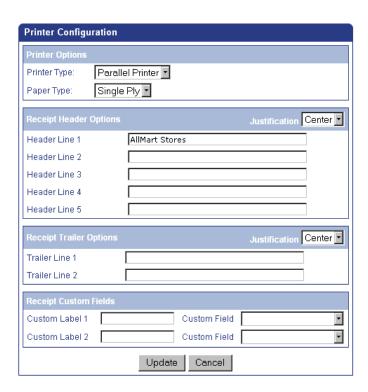
Printer Configuration



The **Printer Configuration** section allows you to configure the receipt printing options for Virtual Merchant. There are three basic printing options that define the output generated upon a successful authorization attempt. The options are: **Do Not Print, Parallel Printer**, and **Serial Printer**.

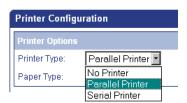
Printer Configuration

This form is used to configure all of the printer options..



There are three options to choose from the **Printer Type** drop-down menu:

- Do Not Print Select this option if you do not wish to print a transaction receipt.
- Parallel Printer Select this option if you wish to print a receipt to a parallel printer.
- Serial Printer Select this option if you wish to print to a serial printer connected to a Com port.



The **Parallel Printer** option will launch a separate browser screen with the receipt information and sends the output to the default printer for the Internet browser. The user must then select the **Print** button in the pop-up window, or use the browser's print feature.

installed the driver from the **Support** page.

The **Serial Printer** option sends a receipt to a configured serial (COM) port. In order for the **Serial Printer** function to work, you must have Windows 2000 or higher, Internet Explorer 6.0 or greater and have successfully

Parallel and Serial Printer Paper Type options

The **Paper Type** drop-down menu is used to select the type of receipt to print. The following **Paper Type** options are available for Parallel or Serial printers.

- In Serial printer mode
 - **Multi-ply** is for 2 ply impact style printers. Both receipts print at once with one copy per paper ply.
 - Single-ply is for 1 ply thermal style printers. Customer and merchant copies are printed.
- In Parallel Printer mode
 - Multi-ply prints customer and merchant receipt copies on 2 pages (1 per page, 8 1/2"x11").
 - Single-ply prints the customer and merchant copies side by side on one sheet of paper (8 1/2"x11").

Receipt Header Options

This section is used to configure the structure for the receipt header. The values for these fields are pulled from the **Merchant Information** page and are not configurable from this page. The printing of each header line can be enabled or disabled from this section.

- Header Alignment Sets the alignment for the receipt header. Choose from Left, Right, or Center.
- **Header Line 1** Enable/Disable the printing of this header line.
- **Header Line 2** Enable/Disable the printing of this header line.
- Header Line 3 Enable/Disable the printing of this header line.
- **Header Line 4** Enable/Disable the printing of this header line.
- **Header Line 5** Enable/Disable the printing of this header line.

Receipt Trailer Options

This section is used to configure the structure for the receipt footer. The printing of each footer line can be enabled or disabled from this section.

- Footer Alignment Sets the alignment for the receipt footer. Choose from Left, Right, or Center.
- Footer Line 1 Enable/Disable the printing of this footer line. This field is user defined.
- Footer Line 2 Enable/Disable the printing of this footer line. This field is user defined.
- Card Holder Agreement Enable/Disable the printing of the Card Holder's Agreement text.

Receipt Custom Options

This section is used to configure up to ten (10) additional user-defined fields to appear on either the parallel or serial receipts. A descriptive label must be entered for each field and it must be bound to one of the defined custom fields for the value to appear on the receipt.

Additional Fields 1-10 - Allows you to add a custom user-defined field to appear on the receipt.

Peripheral Driver Information

The peripheral driver allows Virtual Terminal to use supported peripheral devices for generating receipts, capturing PIN information and processing checks.

Note: Microsoft[®] ActiveX[®] support is required for your browser.

Payment Form

The **Payment Form** allows you to change the basic structure of the HTML payment form. These options allow the Virtual Merchant Payment Form to be modified to have the look and feel of your Website. The form's background, text, header, table border, and hypertext link color can be changed.



To edit the Header or Footer text, select the **Editor** button on the right side of the form and the text editor dialog box will open. For an explanation on use of the **Text Editor**, please refer to **Appendix B**.

Payment Form

This section is used to configure the display options of the consumer payment form..

Content reset to default values. Click Update to save changes.						
Payment Form Setup						
Payment form Header Footer						
Payment Form Header		Editor				
Payment Form Footer		Editor				
		Prev	riew			
Payment form Color			Header			
Body Background:	White RGB V	alue: #FFFFFF				
Body and Table Text:	Black RGB V	'alue: #000000	Table			
Table Header and Border:	RGBV	'alue: #294984				
Table Header Text and Background:	White RGB V	alue: #FFFFFF	background / text			
Html Hyperlink Tags:	Blue RGB V	'alue: #0000FF	<u>Link</u>			
Payment form Images						
Header Logo Image: None Selecte	d		Browse			
Background Image: None Selecte	d		Browse			
Update Cancel Restore Defaults						

You can edit Payment Form Colors using the drop-down options for the listed items, or, if you know the proper corresponding RGB code for the exact color you want, you can change the code in the edit screen to the right of the color list. All changes to the color options will occur simultaneously in the preview screen to allow you to view your new design before updating it on your Website.

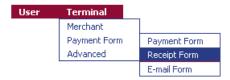
Select the **Update** button to save any modifications. To abandon any current changes, select the **Cancel** button.

Once the **Update** button has been selected, you cannot revert to the old information.

Select the **Restore Defaults** button to revert the Payment Form to the original Virtual Merchant system colors and field values.

Receipt Form

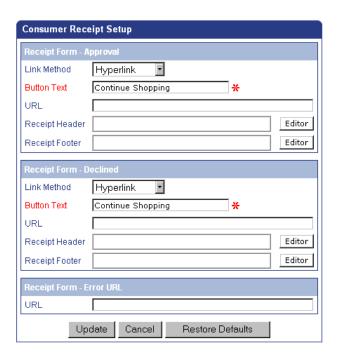
The **Receipt Form** page is used to configure the necessary options to accurately display the transaction authorization results from the Virtual Merchant Payment Form.



The **Receipt Form** page is divided up into sections based on authorization response, allowing you to create pages for approved transactions, declined or "non-approved" authorization attempts, and a section to enter a URL to for errors. For a more detailed explanation of the Receipt Link Method, see **Appendix D**.

Receipt Form

This section is used to configure the display options of the consumer receipt form.. Note that all fields with an asterisk $(\c lpha)$ are required.



Receipt Form - Approval Options

This section within the **Receipt Form Information** page is used to identify how the authorization response page is handled from the Virtual Merchant Payment Form for approved transactions. The options within this section define the method, URL, and appearance of the response page for declined and approved transactions.

- Link Method This selection offers four methods to create the receipt link.
 - Hyperlink This option displays the link back to your Website as a text link on the Virtual Merchant response page.
 - Form GET This option displays the link back to your Website as a button on the Virtual Merchant response page. The response data is returned to your site in the form of a GET.
 - Form POST This option displays the link back to your Website as a button on the Virtual Merchant response page. The response data is returned to your site in the form of a POST.
 - **Get Redirect** This option re-directs the response from the Virtual Merchant payment form to the URL defined in the **URL** field in the form of a GET.

- Button Text This option allows you to specify the text that appears as the link on your Website or response page. This option is only applicable for the Hyperlink, Form GET, and Form POST Link Method options.
- **URL** This option allows you to attach a URL address on your receipts to give your customer's easy access back to your Website. You have three protocol options for your URL.
 - HTTP Hyper Text Transfer Protocol
 - HTTPS Hyper Text Transfer Protocol Secure
 - FTP File Transfer Protocol
- Receipt Header This option allows you to add a custom message at the top of the approved transaction
 response page. To edit the Header text, select the Editor button on the right side of the form to open the text
 editor dialog box.
- Receipt Footer This option allows you to add a custom message to the bottom of the approved transaction
 response page. To edit the Footer text, select the Editor button on the right side of the form to open the text
 editor dialog box. For an explanation on use of the Text Editor, please refer to Appendix B.

Receipt Form - Declined Options

This section within the **Receipt Form Information** page identifies how the authorization response page is handled from the Virtual Merchant payment form for Declined transactions. The options within this section define the method, URL, and appearance of the response page for "non-approved" transactions.

- Link Method This selection offers four methods to create the receipt link.
 - Hyperlink This option displays the link back to your Website as a text link on the Virtual Merchant response page.
 - **Form GET** This option displays the link back to your Website as a button on the Virtual Merchant response page. The response data is returned to your site in the form of a GET.
 - **Form POST** This option displays the link back to your Website as a button on the Virtual Merchant response page. The response data is returned to your site in the form of a POST.
 - **Get Redirect** This option re-directs the response from the Virtual Merchant payment form to the URL defined in the **URL** field in the form of a GET.
- Button Text This option allows you to specify the text that appears as the link on your Website or response
 page. This option is only applicable for the Hyperlink, Form GET, and Form POST Link Method options.
- **URL** This option allows you to attach a URL address on your receipts to give your customer's easy access back to your Website. You have three protocol options for your URL.
 - HTTP Hyper Text Transfer Protocol
 - HTTPS Hyper Text Transfer Protocol Secure
 - FTP File Transfer Protocol
- Receipt Header This option allows you to add a customized message that appears at the top of the
 declined transaction response page. To edit the Header text, select the Editor button on the right side of the
 form to open the text editor dialog box.
- Receipt Footer This option allows you to add a customized message to appear at the bottom of the
 declined transaction response page. To edit the Footer text, select the Editor button on the right side of the
 form to open the text editor dialog box. For an explanation on use of the Text Editor, please refer to
 Appendix B.

Receipt Form – Error URL

This section allows you to enter the URL address to be used when an error occurs.

To save any modifications to the Receipt Form Information page, select the **Update** button. To abandon any current changes, select the **Cancel** button. Once the **Update** button has been selected, you cannot revert to the old information.

Select the Restore Defaults button to revert all of the fields back to the Virtual Merchant default values.

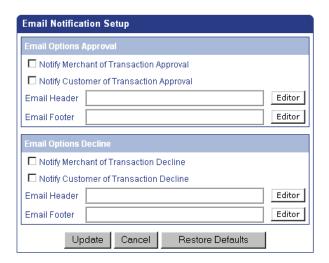
Email Form

The **Email Setup Form** page allows you to set up the distribution list for merchant email notifications. It also allows you to identify if the merchant and/or customer should be notified on transaction approvals or declines. Custom header and footer messages can be added to any approved or declined email messages.



Email Setup Form

This section is used to configure the email options.



Email Options Approval

The **Email Options Approval** section allows you to determine who receives email notification for **Approved** transactions. The e-mail address for the notification is specified in the Merchant screen. It also allows the format of the e-mail header and footer to be modified for custom messages.

- Select the **Notify Merchant of Transaction Approval** box to generate a merchant confirmation email upon approval using the email address you have specified in **Merchant Information** section. If the box is not selected, an approved confirmation email will not be sent to the merchant.
- Select the **Notify Customer of Transaction Approval** box to generate an email receipt using the email address specified by the consumer during the transaction. The customer's email address must be a required option in the **Field Setup** section for this option to function properly. If the box is not selected, the consumer will not receive email notification of the transaction approval.
- To add a custom message at the top and bottom of the customer receipt, select the Editor button on the
 right side of the form and the text editor dialog box will open. For an explanation on use of the Text
 Editor, please refer to Appendix B.

Email Options Decline

The **Email Options Decline** section allows you to determine who receives email notifications for declined transactions. It also allows the format of the e-mail header and footer to be modified for custom messages.

- Select the **Notify Merchant of Transaction Decline** box to generate a merchant email upon a transaction decline using the email address you have specified in **Merchant Information** section. If the box is not selected, a decline confirmation email will not be sent to the merchant.
- Select the **Notify Customer of Transaction Decline** box to generate an email receipt using the email address specified by the consumer during the transaction. The customer's email address must be a required option in the Field Setup section for this option to function properly. If the box is not selected, the consumer will not receive email notification of the transaction decline.

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To add a custom message at the top and bottom of the customer receipt, select the Editor button on the
right side of the form to open the text editor dialog box. For an explanation on use of the Text Editor,
please refer to Appendix B.

Select the **Update** button to save any modifications. To abandon any current changes, select the **Cancel** button. Once the **Update** button has been selected, you cannot revert to the old information.

Select the **Restore Defaults** button to revert all of the fields back to the Virtual Merchant default values.

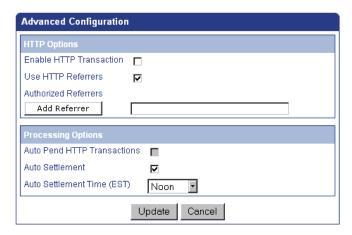
System Setup

The **System Setup** page is used to enable or disable HTTP access to the Payment Form.



System Setup

This form is used configure the advanced system settings.



HTTP Options

- **Enable HTTP Transaction** This option allows you to perform online transactions from a Website outside of the Virtual Terminal. See the Virtual Merchant Developer's Guide for details on Website integration.
- **Use HTTP Referrers** Selecting the **Use HTTP Referrers** option prevents all except the authorized referrers from linking to your site. This assures you that only your Website is sending transactions to your account.
- Authorized Referrers The Authorized Referrers option allows you to select the sites that you wish to
 authorize to link to your site. To add a referrer, type the full URL into the window without removing the http://.
 Example: https://www.mywebsite.com/paymentpage.html. Once you have entered the desired URL into the
 window, select the Add Referrer button. You can add as many referrers as you like, but you must enter them
 separately. To remove a referrer, select the URL you wish to remove and select the Remove Referrer button.

Processing Options

- Auto Pend Sales Automatically pends all sale transactions entered through the Virtual Merchant payment form. All credit and force transactions are automatically pended when entered through the HTTP interface. This option is only for terminals set up as a terminal-based environment.
- Auto Settlement Time This option is used to settle all unpended transactions from the Current Batches
 queue at a specified time each day. This option will only execute once per day and runs on Eastern Standard
 Time (EST). You can change your Auto Settlement Time after your current Auto Settlement Time has
 passed, your Current Batches will not settle until the newly selected time the following day. You have six
 Auto Settle times from which to choose:
 - Midnight
 - 4 A.M.
 - 8 A.M.
 - Noon
 - 4 P.M.
 - 8 P.M.

Select the **Update** button to update your settlement time. Select the **Cancel** button to cancel the changes in the Advanced Configuration section.

Error Messages

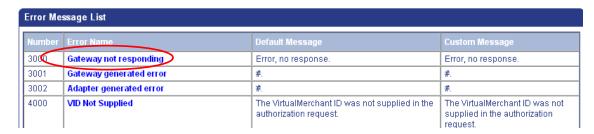
The **Custom Error Messages** page allows you to create custom error messages for decline responses. If there is no value listed in the **Custom Message** field, the default message displays when the error is returned on the declined transaction. If there is a value in the **Custom Message** field, this message displays on the decline transaction, in place of the default message.



To customize a specific error, select the **Error Name** in the Error Message List.

Custom Error Messages

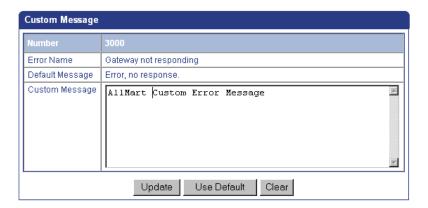
All configurable error messages are displayed here



To customize a specific error message, enter the desired message into the **Custom Message** field. The error message cannot exceed 255 characters and displays in 10 point Arial font on the authorization response page. **Note: The text in this field does not support any customized HTML code.**

Custom Error

This form is used change the default error message settings.



After entering message, select the **Update** button to save your changes. Select the **Clear** button to abandon any changes to the Custom Error Message field.

When a custom message has been defined for the selected error, a **Use Default** button will display. To revert to the original message, select the **Use Default** button to reset the error back to the Virtual Merchant default value.

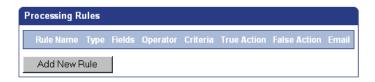
Business Rules

The **New Rules** page allows you to create your own processing business rules for terminals set up for terminal-based processing. System-level rules can be set by the Virtual Merchant System Administrators. These cannot be edited Business rules are run in order, from top to bottom. This order can be changed using the **Arrow** buttons next to the rule. Once a rule has been triggered, no other rules will operate. Actions set up through rules cannot be accessed other than if the rule is triggered. Similarly, when a rule is created for a return it does not affect transaction rules



Business Rules

This form is used to setup processing rules.



To add a new business rule, select the Add New Rule Button on the Processing Rules screen.

New Rule

Add a new business rule.



On the New Rule screen, enter the name of the new business rule in the Rule Name field.

Select the field that will be used as a comparison value for the rule from the **Value** drop-down menu. Available selections are: Ship To Postal Code, Bill To Postal Code, Tran Amount, Return Amount, AVS Response, CVV2 Response, and Settlement.

Select the comparison **Operator** to be used with the Value from the **Operator** drop-down menu. Available selections are: Equal To, Not Equal To, Greater Than, Greater Than Equal To, Less Than, Less Than Equal To, and Not in Set.

The **Criteria** drop-down menu is used to select the **Criteria** to be used with the **Operator** and the **Value** for comparison. Available selections for **Criteria** are: Ship To Postal Code, Bill To Postal Code, and Successful.

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The **Or Value** field is used to enter a second value or value set for comparison with the transaction, return amount, AVS response, or CVV2 response. For AVS or CVV2 response comparisons, the e-mail is sent when the criteria is not found in the response set.

The **True Action** drop-down menu indicates the action that takes place when the criteria comparison is determined to be true. Available selections include Set to Pend and Set to Review.

The Or Rule field is populated by existing business rules that have been created. This Or Rule can be selected instead of selecting a True Action.

The **False Action** drop-down menu indicates the action that takes place when the criteria comparison is determined to be False. Available selections include Set to Pend and Set to Review.

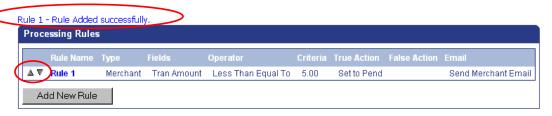
The Or Rule field is populated by existing business rules that have been created. This Or Rule can be selected instead of selecting a False Action.

The **Send Email** drop-down menu allows you to specify an e-mail action based on the rule comparison. Available selections include Send Merchant Email, Send Terminal Email, and Send SMS Email.

Once you have entered the information for the New Rule, select the **Add New Rule** button to save the rule. A screen message indicates when the rule is added successfully and the rule displays in the Processing Rules table.

Business Rules

This form is used to setup processing rules.



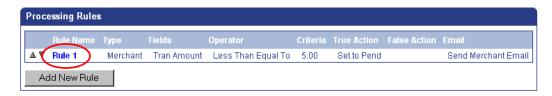
Business rules are run in order, from top to bottom. This order can be changed using the **Arrow** buttons next to the rule.

Edit a Business Rule

An existing business rule can be edited if you have the user rights. To edit an existing rule, select the rule name from the Processing Rules table.

Business Rules

This form is used to setup processing rules.



On the **Update Rule** screen, enter or adjust the fields as necessary and select the **Update** button. To retain the rule unedited, select the **Cancel** button. To delete the business rule select the **Delete** button.

Update Rule

Change the Parameters of an existing business rule.



The screen message informs that the business rule has been edited successfully.

Business Rules

This form is used to setup processing rules.



Using Virtual Merchant

Virtual Merchant



The four menu links at the top right side of Virtual Merchant are to assist and answer questions.

Merchant Connect

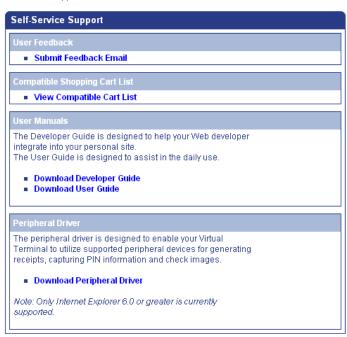
The Merchant Connect link opens the Merchant Connect Home page in a new browser window. Merchant Connect is the online support and reporting tool of the NOVA Network that provides free access to your monthly statements, recent deposits, chargebacks and retrieval requests, customer support and much more.

Support Section

The **Support Section** link is where you can find links to provide feedback via e-mail, view compatible shopping cart information, download the Developer and User Guides, and also download the Peripheral Driver for the devices that are used with Virtual Merchant.

Support Section

Self-Service Support



The **Submit Feedback Email** link allows you electronically submit product feedback to the Virtual Merchant support channel for assistance.



The Feedback Email form consists of five sections:

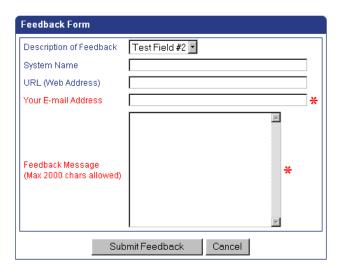
Feedback Email

Please share your feedback on any issues you find throughout the VirtualMerchant Web site. The drop menu beside the Description of Feedback section will give you a choice of the issue that most closely describes the problem you are encountering.

Please give VirtualMerchant the exact **URL (Web address)** of the page on which you encountered the issue. This can be done by copying the address from the window at the top of the opened Web page and pasting it in the **URL (Web address)** section window.

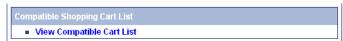
In the Feedback Message window, please give VirtualMerchant a detailed description telling exactly how you found the issue. This will help VirtualMerchant quickly correct the issue.

Note that all fields with an asterisk (**) are required.



- Description of Feedback Enter the category for the feedback request.
 - Suggestions Used to make suggestions for improvement in the Virtual Merchant application.
 - Questions Used to pose questions related to the Virtual Merchant application.
 - Confusing Interface Used to request clarification for any page within the Virtual Merchant application.
 - Issue Used to indicate any processing problems encountered within the Virtual Merchant application.
 - Typo Used to indicate any misspellings or grammatical errors.
- System Name Enter Your Company Name here.
- URL (Web Address) Enter the Virtual Merchant URL related to content of the e-mail.
- Your E-mail Address Enter the e-mail address for a response. This is a required field.
- Feedback Message Please be very descriptive when filling out the Feedback Message. By
 indicating exactly what steps were taken that led to the problem, we can reproduce the issue in an
 effort to correct it quickly.

View Compatible Carts



The **View Compatible Cart List** link shows all of the shopping carts that are compatible for use with the Virtual Merchant application. You can limit the number of carts shown at a time by selecting from the Display drop-down menu. The available value are; 25, 50, 100, and All. The screen refreshes to reflect the selection when it is made.

Compatible Carts

Use this page to manage the shopping cart submissions.

Please note that NOVA Information Systems in no manner, either expressly or by implication, endorses any of the shopping carts utilized for the VirtualMerchant product. Additionally, NOVA Information Systems is not responsible for, nor does it support the functionality of any of the shopping carts utilized for the VirtualMerchant product, nor shall it assume any liability at law or otherwise, for shopping cart errors, omissions, or security compromises should they occur.



To submit a request to have an additional shopping cart added to the list, select the **Add Cart** button.

Add cart

Add the information from the shopping cart submission.. Note that all fields with an asterisk (\divideontimes) are required.



Enter the appropriate Information and select the **Add** button to send the request to the Virtual Merchant support channel for review.

The **Business Contact** information is used for NOVA to contact the shopping cart company, while the **Sales Contact** Information is used in the Compatible Carts List for external contact information.

- Company Name Enter the Shopping Cart Company name. (Required Field)
- **Product Name** Enter the Shopping Cart Product name. (Required Field)
- Web Site Enter the URL for the Shopping Cart homepage.
- Business Contact Name Enter the Business Contact's name. (Required Field)
- Business Contact Phone Enter the Business Contact's phone number. (Required Field)
- Business Contact E-mail Enter the Business Contact's e-mail address. (Required Field)
- Sales Contact Name Enter the Sales Contact's name.
- Sales Contact Phone Enter the Sales Contact's phone number.
- Sales Contact E-mail Enter the Sales Contact's e-mail address.

User Manuals

The **Download Developer Guide** and **Download User Guide** links, under User Manuals, allow you access to the respective guides. It is necessary to download **Adobe Acrobat Reader** in order to read both Virtual Merchant PDF formatted guides. The PDF format allows you to view the form electronically on most computers, as well as to print the Virtual Merchant guides.

User Manuals

The Developer Guide is designed to help your Web developer integrate into your personal site.

The User Guide is designed to assist in the daily use.

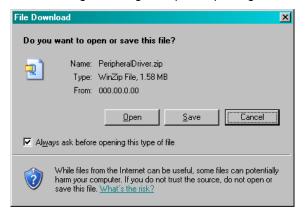
- Download Developer Guide
- Download User Guide

The **User Guide** is designed to assist in the daily use of Virtual Merchant. The screen shots will help you determine your place on the Virtual Merchant site while explaining the function of each feature.

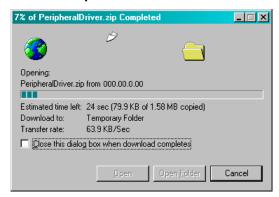
The **Developer Guide** is designed to help Web developers integrate Virtual Merchant into a personal site. The **Developer Guide** offers basic information, complete with examples explaining the functions of the Virtual Merchant features. The appendices translate transaction information into Field Information Codes, Authorization Response Codes, Authorization Source Codes and AVS Response Codes.

Peripheral Driver

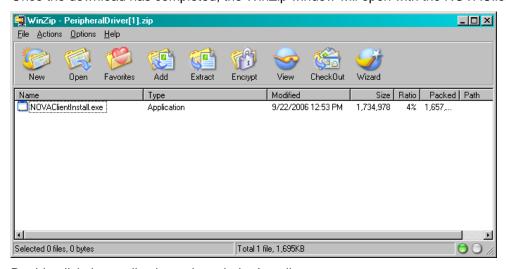
The **Peripheral Driver** link allows you to download the Windows-based application to utilize supported peripheral devices for generating receipts, capturing PIN information and check images



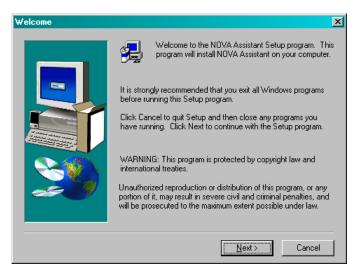
Select the Open Button File Download window. A status bar shows the status of the download.



Once the download has completed, the WinZip window will open with the NOVAClientInstall.exe application.



Double-click the application to launch the Install process.



Select the Next button on the first Welcome window to continue with the Peripheral Driver installation.



Select the check box(es) for the components that you need to install and select the Next button to continue.



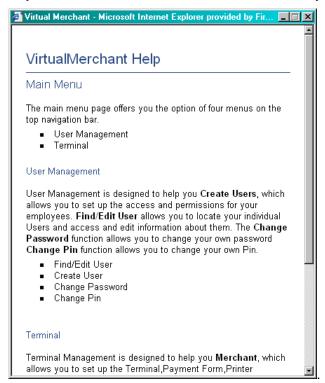
Specify the folder to install the program by either enter a name in the Program Folder field to create a new one, or by selecting a folder from the Existing Folders list. Select the Next button to continue the installation.



If you would like a shortcut on your desktop for the Peripheral Driver, select the check box. Select the **Finish** button to complete the installation.

Help

This option opens a separate browser window displaying the help contents for the current section. Select the **Help** link from the Virtual Merchant screen for which you would like to learn more information.



To close the Help window, select the **Close Window** button at the bottom of the page.

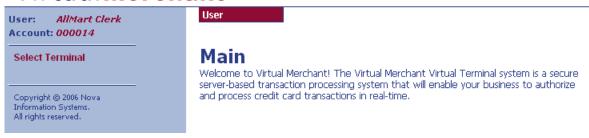
Logout

This option logs the current user out of the Virtual Merchant application. This action is recommended to ensure that no individual is able to masquerade as another user using someone else's computer when they are not present. In addition to this option, each Virtual Merchant user session is limited to a 10 minute inactivity window and will automatically log out a user after 10 minutes of inactivity to prevent unauthorized access.

Main Menu

MerchantConnect | Support Section | Help | Logout

Virtual Merchant

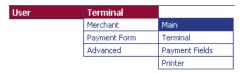


The **Main Menu** displays items on the left navigation menu. Your rights, specified by your administrator, determine access to these items.

- User: Displays the current User Name
- Account: Displays the first six (6) characters of the User ID. This is the Virtual Merchant account that the
 current user has access to.
- Select Terminal Is used when a User is associated to more than one terminal. The Select Terminal
 drop-down menu populates with the associated terminals to select the terminal in which to work. Once a
 terminal is selected the buttons associated with the User ID for the terminal, which are determined by the
 assigned rights, display in the left navigation menu.

Navigation

To navigate using drop-down menus, mouse-over the menus to reveal the sub-menus and selections and then select the link to activate the screen.



Virtual Merchant screens can be also be accessed via hyperlinks. To navigate using hyperlinks, select the screen menu and the selections and options under the menu(s) display as hyperlinks on a new page.



Terminal

Terminal Management is designed to help you the following configurations. **Merchant Setup**, which allows you to set up the Terminal, Payment Form, Printer information for your Company. **Payment Form Setup** allows you to set different Form like Payment, Receipt, Email form. The **Advance Setup** function allows you to set up the System and Error Messages.

- Merchant
 - Main
 - Terminal
 - Payment Fields
 - Printer
- Payment Form
 - Payment Form
 - Receipt Form
 - E-mail Form
- Advanced
 - System Setup
 - Error Messages

Change Merchant Terminal

If your login has rights to access more than one Terminal ID, you will need to select a terminal before you can enter any transactions or make any changes to the **Terminal Setup** sections.

MerchantConnect | Support Section | Help | Logout

Virtual Merchant



If you have access to more than one Terminal ID and would like to change from the currently active terminal, select the **Select Terminal** link in the upper left navigation bar.

The **Select Terminal** drop-down menu option displays with drop-down selections for all of the available Terminal IDs associated with your login.

Select the desired terminal name from the drop-down menu and select the **Select Terminal** button. The selected terminal name appears in the upper section of the left navigation bar and any transaction rights associated with your login and the selected terminal display below the **Select Terminal** link.

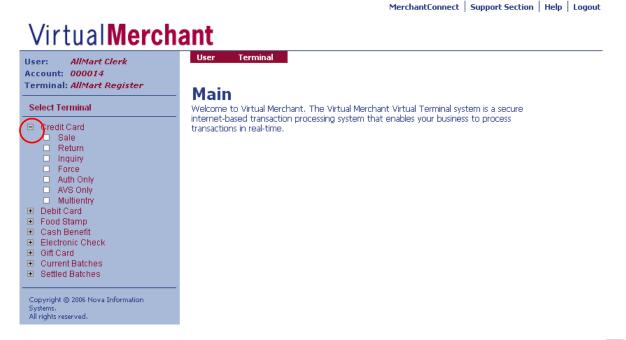
Virtual**Merchant**



Virtual Terminal

The **Main Virtual Terminal** section provides access to all of the transaction entry and management options. From this section, you can enter Credit Card, Debit Cards, EBT cards, Gift Cards, and Electronic Check transactions, depending on your terminal rights. You can also review, print, modify, delete, or settle transactions from the **Current Batches** section. Previous settlement activity can be found in the **Settled Batches** section. From there you can view, search, filter or download all previously Settled Batches.

If your user has access to more than one Terminal ID, you will be prompted to select the desired Terminal ID from a drop-down menu. If you only have access to one Terminal ID, then it will automatically be selected for you.



To view the tasks available for the transaction types associated with your login, select the plus sign 🔳 next to the transaction to expand the menu.

Credit Card Transactions

The **Credit Card Transaction** page allows a user to either swipe a transaction through the use of a Magnetic Strip Reader (MSR) or key-enter the transaction into the Virtual Merchant program. The Swiped Transaction section is only available for Terminal IDs that are configured as a **Retail** market segment and all swiped card

numbers are displayed in a masked format. Access to this section is determined by the rights granted to the user

☐ Credit Card
☐ Sale
☐ Return
☐ Inquiry
☐ Force
☐ Auth Only

□ AVS Only□ Multientry

- Sale Transaction Used to obtain a real-time authorization for a Credit Card sale transaction.
- **Return Transaction** Used to enter a refund transaction for a previous sale.
- Inquiry Transaction Used to obtain the account balance for the Credit Card.

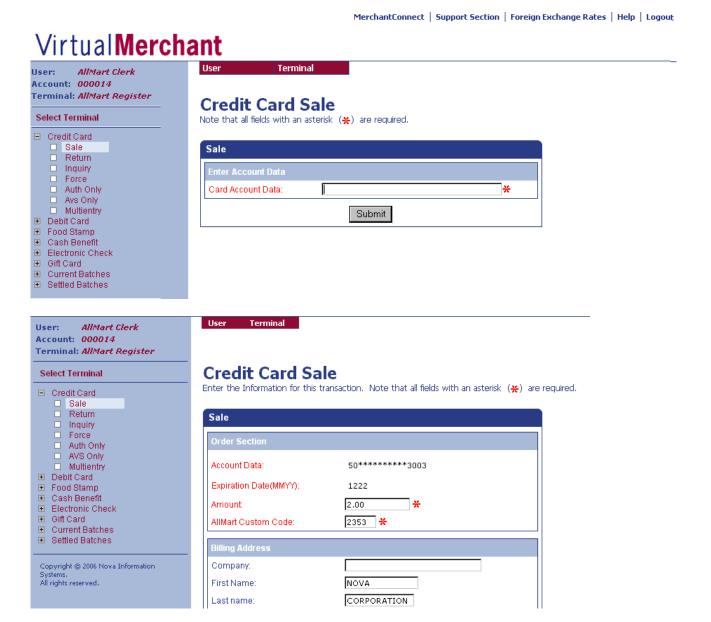
by the system administrator. See the Edit User Rights section for more information.

- **Force Transaction** Used for a sale transaction when the approval code was previously obtained, such as through a voice authorization. This transaction type is the only one that requires the Approval Code to be manually entered for processing. The Approval Code is a required field for this transaction type.
- Auth Only Transaction Used to acquire an approval code for a Force Transaction.
- AVS Only Transaction Used to verify the address given for the transaction matches that of the cardholder.
- **Recurring Transaction** Used to set up payment amounts and the billing cycle in which the payments occur.
- **Installment Transactions** Used to set up payment amounts, the number of payments, and the billing cycle in which the payments occur.
- Multientry Transactions Used to enter multiple Credit Card transactions from one screen.

For Sale, Return, Inquiry, Force, Auth Only, and AVS Only Credit Card transactions:

- 1. Swipe the card through the MSR attached to the computer and the card information is entered into the Virtual Merchant application. The **Submit** button is automatically initiated when the card is swiped through the reader. The **Card Account Number** and **Expiration Date** cannot be edited on this page.
- 2. You can also manually enter the card number in the Card Account Data field and select the **Submit** button.
- Enter the necessary fields for the order and select the Submit button to send the transaction for authorization.

See the **Transaction Detail Page** for information on authorization responses.



The field prompting for each transaction is dependant upon the Payment Form Field Setup for the selected Terminal. See the **Payment Form Fields Setup** page in the Terminal Setup section for more information on this topic.

After entering the appropriate information for the transaction, you must select the **Submit** button at the bottom of the page to submit the transaction for processing.

Credit Card Sale Response

This is the authorization response information. Note that all fields with an asterisk (\divideontimes) are required.



See the Transaction Detail Page for information on authorization responses.

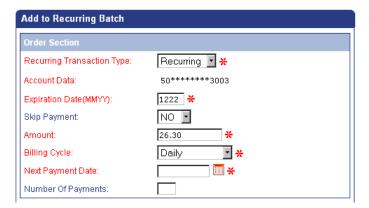
Using the **Update** button at the bottom of Authorization Response page, you are able to save edit changes to some of the fields associated with the transaction. You can also print an additional copy of the receipt using the **Reprint** button.



If the Terminal is set up to process recurring transactions, you can select the **Add to Recurring** button and the information from the transaction is loaded into the **Add to Recurring** screen where you will need to specify the remaining information necessary for the payments. For more information, refer to the Recurring and Installment Credit Card transactions section of this document.

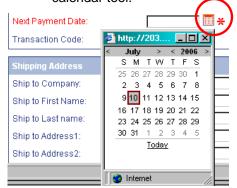
Add to Recurring Batch

Enter the Information For this transaction. Note that all fields with an asterisk (**) are required.



For Recurring, and Installment Credit Card transactions:

- 1. Enter the Credit Card number in the Account Data field.
- 2. Enter the **Expiration Date** using MMYY format.
- 3. Enter the **Amount** for the transaction.
- 4. Select the **Billing Cycle** frequency from the drop-down menu.
- 5. For Installment Transactions, you need to enter the Number Of Payments.
- 6. Enter the **Next Payment Date**, **or** select the red calendar icon next to the field to select the date from the calendar tool.



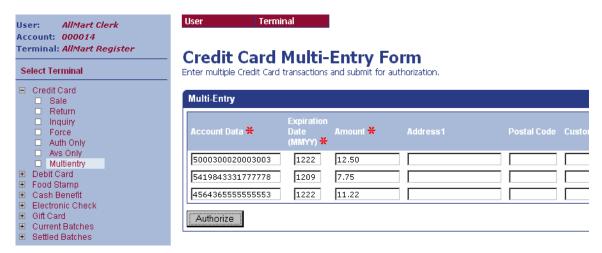
7. Once you have added all of the information for the transaction, select the Add button.

Virtual Merchant



For **Multientry** Credit Card transactions:

- 1. Enter the Credit Card number in the Account Data field.
- 2. Enter the **Expiration Date** using MMYY format.
- 3. Enter the **Amount** for the transaction.
- 4. Once you have added all of the information for the transaction, select the **Add** button.
- 5. Repeat until all of the transactions have been entered.
- Select the Authorize button to submit the transactions.



The Multientry Response page will display the transaction response information for the submitted transactions.

Multientry Response

This page shows the Multientry response information.

Authorize Transactions: 2

Declined Transactions: 0

Error Transactions: 0

Debit Card Transactions

The **Debit Card Transaction** page allows a user to swipe a transaction through the use of a Magnetic Strip Reader (MSR) and prompt for a Personal Identification Number (PIN) to be entered. Access to this section is determined by your merchant account configuration. See the **Edit User Rights** section for more information.



- Purchase Transaction Used to obtain a real-time authorization for a Debit Card sale transaction.
- **Return Transaction** Used to enter a refund transaction for a previous sale.
- Inquiry Transaction Used to obtain the account balance for the Debit Card.

Debit transactions are only available if the current profile is set to the **Host-based** processing environment and the market segment is set to **Retail**.

A Pin Pad and Printer are required on all debit transactions, except for MO/TO and Internet.

For **Purchase**, **Return** and **Inquiry** Debit Card transactions:

1. Swipe the Debit Card through the MSR.

Virtual Merchant



- 2. Enter the **Amount** for the transaction.
- 3. Enter the PIN when prompted by the Pin Pad.
- Enter the necessary fields for the order and select the **Process** button to send the transaction for authorization.

Account Number - Displays the Debit Card account number masked to the last four (4) digits.

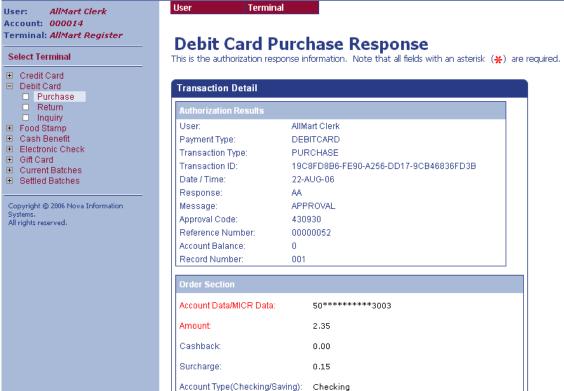
Amount - Enter the transaction amount. A decimal is required.

Cashback Amount – Enter the desired cashback amount. A decimal is required. This is the amount of cash a consumer can receive when using a Debit card. This amount is added to the total purchase amount.

Surcharge Amount – Displays the surcharge amount for the current profile. This value may be set by the merchant to automatically charge a consumer for processing Debit Cards. Please contact Merchant Customer Service for a list of networks that allow surcharge.

User Defined Fields – Enter any user-defined information.





Canadian Debit Transactions

There are variations that are specific to Canadian Debit. The account type, either checking or savings, is selected on the pin pad screens. Reversal transactions are only handled systemically.

Key Exchange is manually used as a troubleshooting tool for Canadian Debit. A key exchange is completed with the first debit transaction of the day. For terminals configured for Canadian Debit Transactions, the Key Exchange navigation link appears under the Debit Card link on the left side of the screen. Select this link to initiate a Key Exchange.





A message indicates the result of the Key Exchange process.

Voiding a Canadian Debit Transaction

Important: Canadian Debit Transactions can only be voided if the batch is open AND the card is swiped and the PIN entered once again. The number cannot be entered manually.

A Canadian Debit Transaction Void is initiated from the Response screen with the details for the initial transaction. To view current transaction activity, select the **Current Batches** link.

1. To view the batch information, select the **Main** link under the **Current Batches** link.

Current Activity

Select a transaction to review the authorization details.



In the Current Open Batches table, select the card number, in the Card **Data** column, for the transaction to be voided to open the Transaction Detail screen.

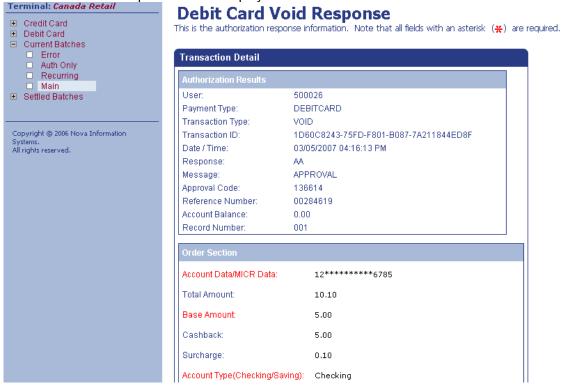


2. Select the **Void** button at the bottom of the screen to initiate the Debit Card Void process.



- 3. On the **Debit Card Void** screen, swipe the card used in the initial transaction and select the Submit button.
- 4. Enter the PIN for the account when prompted by the pin pad.

A Debit Card Void Response screen displays the data for the voided transaction.



The voided transaction will display in the Current Open Transactions table with Void as the Tran Type value.

Current Activity

Select a transaction to review the authorization details.



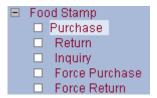
Food Stamp Transactions

The **Food Stamp Main Authorization** screen is where all EBT Food Stamp transaction activity is entered into the program. A Food Stamp transaction is the process of using an Electronic Benefit Transaction (EBT) for the purchase of goods, services, and to obtain cash that debits the cardholder's personal EBT account.

Food Stamp transactions are only available if the current profile is set to the host-based processing environment and the market segment is set to Retail.

A Pin Pad and Printer are required on all Food Stamp transactions.

Each of these values will only display if the current user has the appropriate rights to access the transactions.



- Purchase Transaction Select the Purchase link to enter a Food Stamp Purchase transaction.
- Return Transaction Select the Return link to enter a Food Stamp Return transaction.
- Inquiry Transaction Select the Inquiry link to obtain the current balance of a Food Stamp card.
- Force Purchase Select the Force Purchase link to enter a Food Stamp "Voucher Clear" Purchase transaction.
- Force Return Select the Force Purchase link to enter a Food Stamp "Voucher Clear" Return transaction.

Once a transaction type is selected, the enter Card Data screen displays. Swipe the card through a Magnetic Card reader device (Retail Only) to proceed to the transaction entry screen.



- 1. Enter the **Amount** for the transaction.
- 2. Enter the PIN number for the account using the PIN pad.
- 3. Enter the necessary fields for the order and select the **Process** button to send the transaction for authorization.



The Food Stamp Purchase Response screen displays the results of the authorization attempt. If the program is configured for parallel receipt printing, then the program will launch a separate browser window with the receipt information. Use the browser's printing options to physically print the receipt. If the program is configured to print to a peripheral printer, then the receipt will automatically print.

Cash Benefit Transactions

The Cash Benefit Main Authorization screen is where all EBT Cash Benefit transaction activity is entered into the program. A Cash Benefit Transaction is the process of using an Electronic Benefit Transaction (EBT) for the purchase of goods, services, and to obtain cash that debits the cardholder's EBT account.

Cash Benefit Transactions are only available if the current profile is set to the **Host-based** processing environment and the market segment is set to **Retail**.

A **Pin Pad** and **Printer** are required on all Cash Benefit transactions.



- Purchase Transaction Select the Purchase link to enter a Cash Benefit Purchase transaction.
- Inquiry Transaction Select the Inquiry link to obtain the current balance of a Cash Benefit card.

Each of these values will only be displayed if the current user has the appropriate rights to access the transactions.



Account Number - Displays the Cash Benefit account number masked to the last four (4) digits.

Amount – Enter the transaction amount. A decimal is required.

Cashback – Enter the desired amount of cash back. A decimal is required. This amount will be added to the total purchase amount.

Surcharge Amount – Displays the surcharge amount for the current profile. This value may be set by the merchant to automatically charge a consumer for processing Debit Cards. Please contact Merchant Customer Service for a list of networks that allow surcharge.

User Defined Fields – Enter any user-defined information.

Enter all of the relevant information required for the Cash Benefit Purchase and select the **Process** button to send the transaction to the server for authorization, or select the **Clear** button to clear the form and start again.

If **Process** is selected, the program will display the total transaction amount on the PIN Pad device and prompt the consumer to enter their Personal Identification Number (PIN). Once the consumer successfully enters their Personal Identification Number (PIN), the transaction is sent for authorization.

The Cash Benefit Purchase response screen will display the results of the authorization attempt. If the program is configured for parallel receipt printing, then the program will opens a new browser window with the receipt information. Use the browser's printing options to physically print the receipt. If the program is configured to print to a peripheral printer, then the receipt will automatically print.

Virtual Merchant



User – Displays the User Id for the transaction.

Payment Type – Displays the payment type for the transaction.

Transaction Type – Displays the transaction type.

Date/Time – Displays the transaction date and time information.

Response – Displays the response code for the transaction.

Message – Displays the Authorization Message returned for the authorization attempt.

Approval Code – Displays the Approval Code returned for the authorization attempt.

Reference Number – Displays the Reference number returned for the authorization attempt.

Food Stamp Balance - Displays the remaining Food Stamp balance on the EBT Card.

Cash Benefit Balance - Displays the remaining Cash Benefit balance on the EBT Card.

Record Number - This value is only displayed if the profile is configured for Host-Based Processing.

Account Data/MICR Data - Displays the Food Stamp account number masked to the last four (4) digits.

Amount – Displays the base transaction amount.

Surcharge – Displays the surcharge amount added to the transaction.

User Defined – Displays any user defined fields that were entered on the transaction.

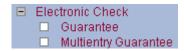
Electronic Check Transactions

The Electronic Check Service (ECS) Main Authorization screen is where all Electronic Check activity is entered into the program. An ECS Transaction is the process of electronically imaging a check for the purchase of goods and services that debits the account.

A Check Imager and Printer are required on all ECS transactions.

Each of these values under the Electronic Check menu are driven off of the configuration for the currently selected profile and **only one of the three options (shown below) will display at a time**. The transaction only displays if the current user has the appropriate rights to access the transactions.

Electronic Check	
□ Conversion Only	
 Multientry Conversion Only 	



Electronic Check	
□ Verification	
 Multientry Verification 	

Conversion Only Allows you to enter an ECS Purchase for a Conversion Only transaction.

Multientry Conversion Only Allows you to enter multiple ECS Purchases for Conversion Only transactions.

Guarantee Allows you to enter an ECS Purchase with Guarantee transaction.

Multientry Guarantee Allows you to enter multiple ECS Purchases for Guarantee transactions.

Verification Allows you to enter an ECS Purchase for a Verification transaction.

Multientry Verification Allows you to enter multiple ECS Purchases for Verification transactions.

Note: the options listed above are determined by your merchant account setup.

Electronic Check Guarantee

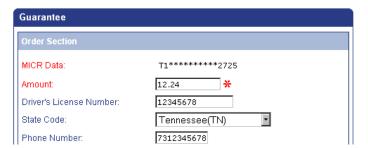
Note that all fields with an asterisk (*) are required.



Once a transaction type is selected, the **Enter MICR Data** screen displays. Swipe the check through check imaging device to proceed.

Electronic Check Guarantee

Enter the Information for this transaction. Note that all fields with an asterisk (**) are required.



The **MICR Data** field cannot be edited on this screen. Field labels that appear in red are required, the labels in black are optional, and the fields that appear in blue are user-defined.

Field Description

MICR Data The check data, masked except for the last for digits, as obtained from the MICR reader.

Amount Enter the transaction amount. A decimal is required.

User Defined Fields Enter any user-defined information.

Enter all of the information required for the Electronic Check Purchase. Select the Process button to send the transaction to the server for authorization, or select the Clear button to clear the form and start again.

The Electronic Check Purchase response screen displays the results of the authorization attempt. If the program is configured for parallel receipt printing, a window will open with the receipt information and you will be prompted to print he receipt. If the program is configured to print to a peripheral printer, then the receipt will automatically print.

Electronic Check Guarantee Response

This is the authorization response information. Note that all fields with an asterisk (*) are required.



Field Description User The User ID

Payment Type The type of payment

Transaction Type The transaction type for the payment type

Transaction ID This value displays the unique Virtual Merchant Record ID for this transaction.

Date/Time This value displays the **Date** and **Time** at which the transaction took place. The time stamp

displayed is based on the time zone that you have indicated in your merchant profile.

Response This field contains the 2-character authorization response code.

Message This field contains the 16-character authorization response message. **Approval Code** Displays the Approval Code returned for the authorization attempt. Reference

Number

Displays the Reference number returned for the authorization attempt.

Record Number This value is only displayed if the profile is configured for Host-Based Processing.

Tran Reference Number

Displays the "parsed" checking Transit Routing number.

Account Number

Displays the "parsed" checking account number masked to the last four (4) digits.

Check Data Displays the "parsed" check serial number.
 Amount Displays the authorized transaction amount.
 Driver's License Displays the user's Driver's License number.

State Code Displays the state abbreviation.

Phone Number Displays the phone number.

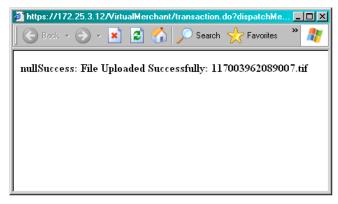
User Defined Displays any User Defined values that were entered on the transaction.

Select the **Reprint** button if a reprint of the transaction receipt is necessary or if the original receipt window was inadvertently closed.

Select the View Image button to see the image captured by the check scanner for the transaction.



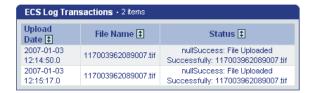
The **Upload Image** button allows you to manually select an image to be uploaded to the WebConnect database and Encircle from this response page, the batch details page in the current and/or history batches post authorization. This is available for both "Selective" and "All" option chosen under the ECS Setup panel.



The **Log File** button opens the Log File page for the selected entry. The Log File Page displays the previous recurring / installment activity on this particular transaction.

Previous ECS Activity

View the previous ecs processing details.



Gift Card Transactions

The Gift Card Main menu screen is where all Gift Card activity is entered into the program. Gift card transaction types are available depending on your terminal rights to the transactions and if the profile is configured to accept Gift Card transactions (EGC).



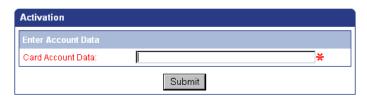
- Redemption Gift Card purchase or redemption transactions should be entered here.
- Credit This transaction is used to refund a previous redemption transaction to a Gift Card account.
- Inquiry This option is used to check the current balance of a Gift Card account.
- Activation All Gift Card activation transactions should be entered here.
- Reload This transaction is used to increase the current balance of the Gift Card account.
- Card Return This transaction is used to refund the balance of a Gift Card account.

Gift Card Activation

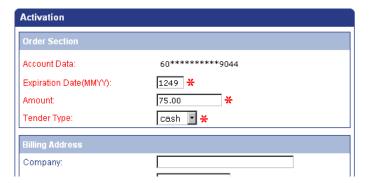
Gift cards must be activated via the Gift Card Activation screen prior to use. Select the Activation link under Gift Card and swipe or enter the card number in the Card Account Data field.

Gift Card Activation

Note that all fields with an asterisk (**) are required.



 Select the **Submit** button. For manually entered numbers you need to also enter the expiration date for the card.



- 2. Enter the activation amount and select the tender type for the transaction from the drop menu.
- 3. Enter any additional information required for Gift Card activation and select the **Process** button. The Gift Card Activation Response screen displays with the authorization information for the transaction.

Gift Card Activation Response

This is the authorization response information. Note that all fields with an asterisk (*) are required.

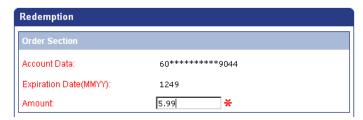


Gift Card Redemption

The Gift Card Redemption transaction is used to make a purchase using the balance on the Gift Card account. The Account Number field cannot be edited on this screen. If the transaction was swiped through a card reader, then the Expiration Date field is also unable to be modified on this screen.

Gift Card Redemption

Enter the Information for this transaction. Note that all fields with an asterisk (\divideontimes) are required.



Enter the amount for the transaction. Enter any other necessary data and select the **Process** button. The Gift Card Redemption Response screen displays with the authorization information for the transaction.

Gift Card Redemption Response
This is the authorization response information. Note that all fields with an asterisk (※) are required.

Transaction Detail				
Authorization Results				
User:	AllMart Clerk			
Payment Type:	GIFTCARD			
Transaction Type:	REDEMPTION			
Transaction ID:	191DD4754-E5D1-D8D5-E137-3ADB186E1763			
Date / Time:	30-AUG-06			
Response:	AA			
Message:	APPROVAL			
Approval Code:	122258			
Reference Number:	00000409			
Account Balance:	69.01			
Record Number:	001			
Order Section				
Account Data/MICR Data:	60*******9044			
Expiration Date(MMYY):	1249			
Amount:	5.99			

Dynamic Currency Conversion (DCC)

With NOVA's DCC service, international Visa and MasterCard Credit Card purchases are converted instantly at the point of sale to the cardholder's home currency, at a very competitive exchange rate – eliminating unpleasant surprises for consumers when their Credit Card bill arrives. In order to process DCC transactions the terminal must be set up to do so by the Merchant Administrator.

Entering DCC Credit Card transactions in Virtual Merchant is very similar to standard Merchant Credit Card transactions. The exceptions include the Cardholder Amount, Cardholder Currency, Conversion Rate, and Markup (%) fields.

- Swipe the card through the MSR attached to the computer or manually enter the card number and click the **Submit** button. The Order screen for the sale displays the Cardholder Currency and the Conversion Rate to be used in the DCC Transaction.
- 2. Enter amount of the purchase in US Dollars in the Amount field. For manually entered card numbers you will need to also enter the Expiration Date in MMYY format.

Credit Card Sale

Enter the Information for this transaction. Note that all fields with an asterisk (*) are required.



 Enter any other necessary fields for the order and select the Process with DCC button to send the transaction for authorization. If you select the Process without DCC button, the transaction will be processed in US dollars.



The Authorization Results screen displays with the transaction information.

Authorization Results AllMart Clerk User: Payment Type: CREDITCARD Transaction Type: SALE 1A9B8F087-D110-DCF0-4568-61F34E2FC040 Transaction ID: Date / Time: 02/23/2007 10:57:22 AM Response: APPROVAL Message: Approval Code: N57935 AVS Response: Account Balance: 0.00 Record Number:

Order Section

Account Data/MICR Data: 49******5554

 Expiration Date(MMYY):
 1222

 Amount:
 10.00

 Cardholder Amount:
 7.87

 Cardholder Currency:
 EUR

 Conversion Rate:
 0.78702

 Markup(%):
 3.25

The Orders section contains the Amount in US dollars, the Cardholder Amount field contains the transaction amount after it has been converted using the Conversion Rate. See the **Transaction Detail Page** for information on authorization responses.

Transaction Detail Page

The results of a successfully approved transaction will display on the **Transaction Detail** page. The Transaction Results section displays all of the information obtained during the authorization process. Each subsequent section contains all of the values entered for the transaction in the order defined by the **Payment Form Fields Setup** under the Terminal Configuration section.

From this form, you can modify billing and shipping fields, or, for authorization only transactions, you can adjust the amount for the transaction to an amount that is equal to or lower than the original authorization amount by changing the values and selecting the **Update** button at the bottom of the form. Host-based terminal transactions cannot be adjusted.

If Receipt Printing is enabled for the currently selected terminal, then a receipt page is launched in a new window. If a serial printer is attached, then a receipt will be sent to the serial printer, otherwise a separate window will display the receipt information and you will be prompted to print the receipt on the parallel printer.

To re-print the current receipt, select the **Print** button at the bottom of the form. This will print a copy of the original with the word "Duplicate" on the receipt.

'irtual**Merchant** Terminal AllMart Clerk Account: 000014 Terminal: AllMart Register Credit Card Sale Response Select Terminal This is the authorization response information. Note that all fields with an asterisk (*) are required. □ Credit Card □ Sale Transaction Detail Return Inquiry Force User AllMart Clerk Auth Only Avs Only Payment Type: CREDITCARD Multientry Transaction Type: SALE ■ Debit Card Transaction ID: 1F6DF730C-0A9F-72E4-A47A-344E9F5B79FC Date / Time: 21-AUG-06 Cash Benefit Response: AA ■ Gift Card Message: APPROVAL ■ Current Batches QAV1MC Approval Code: Settled Batches AVS Response: Account Balance: 150 Copyright @ 2006 Nova Information 002 Systems. All rights reserved. Record Number: Order Section 54*********7778 Account Data/MICR Data: Expiration Date(MMYY): Amount 1.50 Update

- User This value displays the User Name of the user, who submitted the transaction.
- Payment Type This value payment type for the transaction.
- Transaction Type This value displays the transaction type for the currently selected transaction.
- Transaction ID This value displays the unique Virtual Merchant Record ID for this transaction.
- **Date/Time** This value displays the **Date** and **Time** at which the transaction took place. The time stamp displayed is based on the time zone that you have indicated in your merchant profile.
- Response This field contains the 2-character authorization response code.
- Message This field contains the 16-character authorization response message.
- Approval Code This is the 6-digit approval number received upon successful authorization.

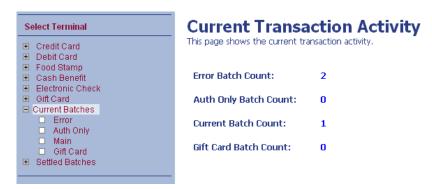
- AVS Response Code This value displays the Address Verification response for this transaction.
- CVV2 Response Code This value displays the CVV2, CVC2, or CID response for this transaction.
- Account Balance This value displays the account balance.
- Record Number This value is only displayed if the profile is configured for Host-Based Processing.

For more information on the authorization **Response Codes**, **AVS Responses**, **CVV2 Responses**, refer to **Appendix A**.

Current Batches

The **Current Batches** section displays the current transactions that have not been submitted for settlement. The screens and controls in this section allow you to view, search, sort, and modify batch transaction information. You can also download batch files and generate reports based on batch data. Access to view and/or modify batch information is dependent on user rights and the type of terminal configuration.

Host-based terminals can only Void or Settle transactions, whereas **Terminal-based** terminals can Delete, Pend, Unpend, Void, Unvoid, Set to Review, Release, and Settle transactions.



To view current transaction activity, select the **Current Batches** link. To view the batch information for the transaction types, select the appropriate link under the **Current Batches** link.



The **Main** link, under Current Batches, displays the transactions that have not been submitted for settlement, except for **Gift Card, Auth Only, Recurring,** and **Error** transaction data, which is accessed through the respective links.

Current Activity

Select a transaction to review the authorization details.



The Current Open Transactions table can be sorted by selecting the column headers. To reverse the order of the sort, select the column header once again.

- Seq Nbr

 Sort the table by batch sequence numbers.
- User ID Sort the table by the User ID the entered the transactions.
- Tran Status Sort the table by transaction status.
- Tran Type Sort the table by type of transaction.
- Transaction Date Sort the table by transaction authorization date.
- Card Data Sort the table by Credit Card number.
- Entry Type Sort the table by the entry type, either K for keyed entry or S for swiped card.
- AVS Code Sort the table by Address Verification response code

• CVV2 Response – Sort the table by CVV2, CVC2, or CID response code.

Transaction Amount – Sort the table by the total amount

The **Display** control sets number of transactions viewed per page. The default value is 25 and can be adjusted to display 25, 50, 75, 100, 250, 500, 750, or All records using the drop-down list.

When there are more transactions than specified by the Display control, navigation buttons display in the title bar above the table. The number of items being shown is also identified on the left side of the title bar.



The navigation buttons allow you to select a specific page . the next or previous page , or advance to the first or last page for batch transactions.

The **Transaction Count** and **Net Amount** values display at the bottom of the transaction list. If the list has been filtered or a search preformed, these values reflect the totals of the current filtering or sort criteria.

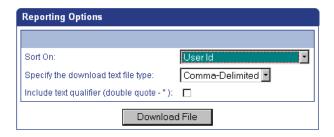
Download Current Batches



The **Download** link allows you to export all of the transaction data shown in the Current Open Transactions table. Once you have the correct information showing in the table for the download, select the **Download** link.

Download

Select the desired download format.



Select from the **Sort On** drop-down menu on the **Download** screen to specify the field the data will be sort by in the download. The fields available to sort on include:

- User ID Sort the download by User ID
- **Transaction Type** Sort the download by the type of transaction
- Card Desc (Card Type) Sort the download by card type
- Amount (Total Amount) Sort the download by the amount totals.
- Transactions Date and Time) Sort the download by transaction date.
- Card Data Sort the download by card number.
- **Invoice Number** Sort the download by invoice number.
- Any Custom Fields Sort the download by a required custom field.

Use the **Specify the download text file type** drop-down menu to indicate the type of file that will be generated by the download.

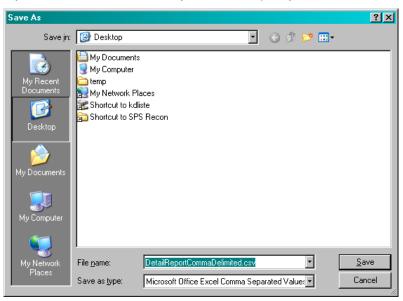
- Comma-Delimited Generates a Microsoft Excel worksheet that opens in a new Internet Browser window.
- Tab-Delimited Generates a Microsoft Excel worksheet that opens in Microsoft Excel
- XML Generates an XML document that opens in a new Internet Browser window.

Select the **Include text qualifier** check box to add quotation marks around the downloaded fields. This option is provided when for Comma or Tab Delimited file type is selected.

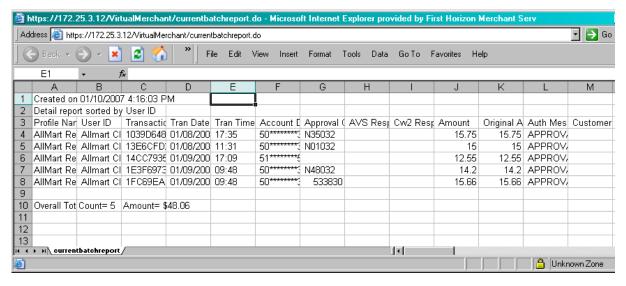
Select the **Download File** button. A prompt asks you if you want to open or save the file download.



If you select the Save button, you need to specify the location and file name in the Save As window.



If you select the **Open** button on the File Download prompt, the downloaded information displays in a new browser window.



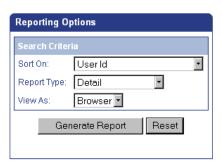
Generate Reports from Current Batches

Current Open Transactions	Download Reports Search Filter:	All

The **Reports** link allows you to generate reports using current batch data. Once you have the correct information showing in the table, select the **Reports** link.

Reporting

Enter the desired reporting criteria.



Select from the **Sort On** drop-down menu, on the **Reporting** screen, to specify the field the data will be sort by in the download. The fields available to sort on include:

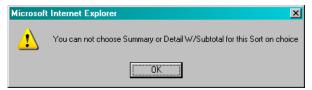
- User ID Sort the download by User ID
- **Transaction Type** Sort the download by the type of transaction
- Card Desc (Card Type) Sort the download by card type
- Amount (Total Amount) Sort the download by the amount totals.
- Transactions Date and Time) Sort the download by transaction date.
- Card Data Sort the download by card number.
- Invoice Number Sort the download by invoice number.
- Any Custom Fields Sort the download by a required custom field.

Use the **Report type** drop-down menu to indicate the type report to generate.

The types of reports are:

- **Detail** a detailed report for the transaction data.
- Detail w/Subtotals a detailed report with subtotals for the number and transaction amount.
- Summary Generates a summary for the transactions based on the Sort On selection.

Note: If the Sort On selection cannot be used to create a Detail w/Subtotals or Summary report, a message will display with this information.



The View As drop-down menu indicates the format of the report. The available format options include:

- **Browser** the report is format displays in the Virtual Merchant browser.
- **CSV** the report format is Comma Separated Values. When selected, CSV reports prompt you to Open or Save the report in the same manner as a Download. For steps on opening or saving a report, refer to the **Download File** section of this user guide.

Search Current Batches

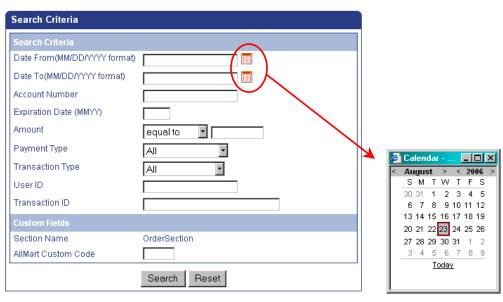
Current Batches can be searched by selecting the **Search** link from the title bar of the table.



The Search Criteria form allows you to enter the values used to search for specific unsettled transaction batches. If additional fields are identified as required in the Payment Form Field Setup, then these fields can also be used as search criteria. For example, the custom field AllMart Custom Code was set up as a required field so it displays in the search form and can be used to search the batch contents.

Transaction Search

Enter the transaction search criteria.



Available search criteria include:

- Date From: (MM/DD/YYYY) Enter, or select using the calendar tool, the starting date for the search range.
- Date To: (MM/DD/YYYY) Enter, or select using the calendar tool, the ending date for the search range.
- Account Number Enter the number of the account used in the transaction.
- Expiration Date (MMYY) Enter the Expiration Date of the Credit Card used in the transaction.
- Amount Search for a transaction Amount Equal To, Less Than, or Greater than the amount entered.
- Payment Type To search by the payment type, select from this drop-down menu.
- Transaction Type Enter the Transaction Type for the search. Select Refund, Force, or Sale.
- User ID Enter the User ID for which to search.
- Transaction ID Enter the Transaction ID for which to search.

Select the **Search** button to initiate the search, or select **Reset** to clear the values in the Search Criteria window.

Filter Current Batches

Current Batches can be searched by selecting the Filter link from the title bar of the table.



Selecting one of the options in the **Filter** drop-down menu will filter the transactions on the Current Open Transactions table. The filtering options are:

- All No filter is applied.
- Pended This option filters the batch list for Pended transactions only.
- Unpended This option filters the batch list for Unpended transactions only
- Review This option filters the batch list for transactions set for Review only
- Sale This option filters the batch list for Sale transactions only.
- **Return** This option filters the batch list for Return transactions only.
- Force This option filters the batch list for Force transactions only.
- Force Purchase This option filters the batch list for Force Purchase transactions only.
- Force Return This option filters the batch list for Force Return transactions only.
- Void This option filters the batch list for Void transactions only.
- Reversal This option filters the batch list for Reversal transactions only.

Performing Transaction Tasks

The following is a list of tasks that can be initiated for transactions from the Current Open Transactions. The actions that are available are dependent on the terminal setup, transaction type and user rights. In order to perform an action on a transaction the checkbox in the first column of row must be select, either manually or using the **Select All** button.

- **Select All** This button selects all currently displayed transactions. After selecting the transactions, you can perform different actions on them, such as **Settle**, **Void**, **Delete** or **Pend**.
- Unselect All This button unselects all currently displayed selected transactions.
- Pend This button allows you to Pend the currently selected transactions. Pend is available in terminal-based mode only.
- **Unpend** This button allows you to remove the Pend status for the currently selected transactions. **Unpend** is available in terminal-based mode only.
- **Delete** This button permanently removes selected transactions from your open batch. Once a transaction has been deleted it <u>cannot be recovered</u>. A prompt will ask you to confirm your action. Select **Cancel** to keep the transaction(s) or **OK** to delete the transaction(s). **Delete** is available in terminal-based mode only.
- Void This button allows you to Void the currently selected transactions.
- **Unvoid** This button allows you to **Unvoid** the currently selected transactions. **Unvoid** is available in terminal-based mode only.
- Set to Review This button allows you to Set to Review the currently selected transactions. Set To Review
 is available in terminal-based mode only.
- Release This button allows you to Release previously reviewed transactions. Release is available in terminal-based mode only.
- Settle Selected (terminal-based)/Settle All (host-based) This option will submit all currently selected transactions for settlement. Pended transactions will not be included in this process. A confirmation box will be displayed showing the total number of transactions that are currently being submitted for settlement. Select Continue to settle the transactions or Cancel to return to the Current Open Transactions screen. After the Continue button has been selected, Virtual Merchant will begin to send the transactions to the NOVA Network for settlement. This process may take a few minutes to complete. Do not select the Continue button more than once to eliminate any errors in the settlement process.

Current Batches Details Page

Selecting the **Card Data** link from the **Current Open Transactions** page displays the details of the transaction. The first section displays all of the authorization response information obtained when the transactions was submitted for authorization. Each additional section defined in the **Payment** Form Field Setup will be displayed with each field that contains data.

Current Activity

Select a transaction to review the authorization details.



If receipt printing is enabled in the Terminal Configuration section, then the **Print** button will be displayed. Select the **Reprint** button to submit a duplicate Receipt.

Current Batches Main Response

This is the authorization response information. Note that all fields with an asterisk $(\frac{\mathbf{x}}{\mathbf{x}})$ are required.



Current Batches Auth Only

The **Auth Only** link, under Current Batches, allows you to view the Authorization Only transactions for Current Batches. These transactions can be manually deleted or converted to an actual transaction.

In a Terminal-Based environment, a **Convert to Sale button** allows you to convert the Auth Only transaction to a Sale. In Host-Based terminals, you can convert Auth Only transactions to a forced transaction using the **Convert to Force** button.

Authorization Only

This batch contains the previously pre-authorized credit card transactions



To view the details and make changes to an Authorization Only transaction, select the **Card Data** field. To convert the item to a transaction, select the check box for the row and select the **Convert to Force** or **Convert to Sale** button, which are available dependent on the terminal set up. The screen displays Batch Response information for the converted authorization only item

Batch Response

This page shows the Batch response information.

Authorize Transactions: 1

Declined Transactions: 0

Error Transactions: 0

Once converted, a transaction will display on the Main Current Batches screen with the Trans Type value of "Force".

Current Activity

Select a transaction to review the authorization details.



Current Batches Gift Card

The Current Gift Card Activity screen allows you to view and settle current Gift Card transactions. To view the details of a specific Gift Card transaction, select the **Card Data** field in the table.

Current Gift Card Activity

Select the gift card transaction to review.



The Transaction Detail form allows you to view the response information for the transaction. You are also able to edit and update some of the transaction detail fields and reprint the response information.

Current Batches Gift Card Response

This is the authorization response information. Note that all fields with an asterisk (*) are required.



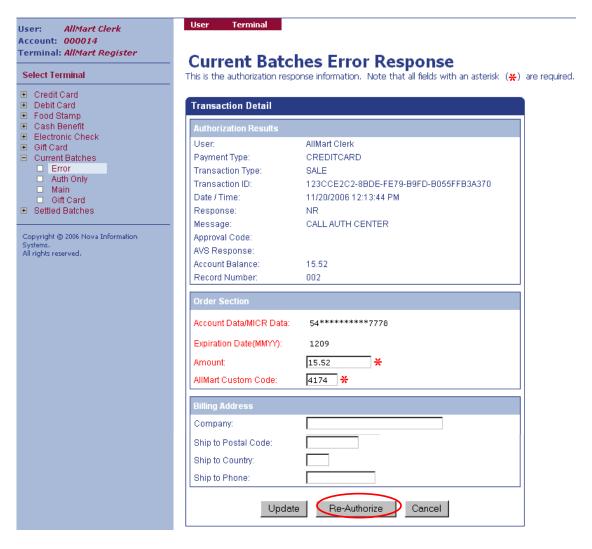
To save any changes made to the **Transaction Detail** form, select the **Update** button. Use the **Reprint** button to print another copy of the information. The **Cancel** button closes the **Transaction Detail** form and returns you to the **Current Gift Card Activity** screen.

Current Batches Error Messages

The Error Batch section displays declined transactions. You are able to view and edit the details of the transactions by selecting the Card Data field in the table.

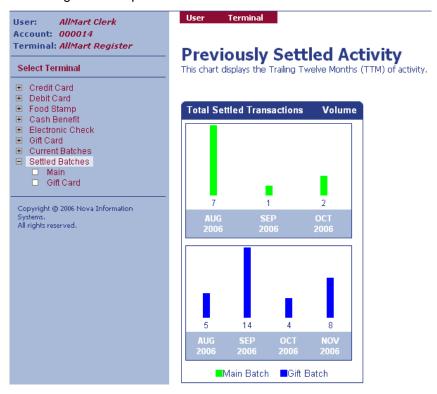


You can also attempt to re-authorize a transaction from the Error Batch screen by viewing the transaction details and then selecting the **Re-Authorize** button.

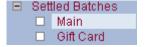


Settled Batches

The Settled Transaction screen allows you to view settlement activity for the previous twelve (12) months. From this section, you can access each individual settlement batch and drill-down to specific transaction details. You can search, sort, filter, or download the contents of each batch from this section. You can also download batch files and generate reports based on batch data.



Select the Main link, under the Settled Batches link, to view the settled batch activity for the previous 12 months.



Settled Activity Select the batch to review



The previously settled batches page is sorted in descending order. The sorting order of the page can be reversed by selecting the column header. The fields that can be sorted are:

- **Batch ID** Sorts the settled batches by the three 3 digit batch number.
- Batch Response Sorts the settled batches by the NOVA Settlement response number.
- **Settle Date** Sorts the settled batches by the three 3 digit batch number.
- **Net Count** Sorts the settled batches by the number of transactions in the batch.
- Net Amount Sorts the settled batches by the net settlement amount for each batch.

- Number Purchase/Forces Sorts the settled batches by the number of purchase/force transactions in the batch.
- Number Returns Sorts the settled batches by the number of Return transactions in the batch.
- Number Voids Sorts the settled batches by the number of Void transactions in the batch.

To view the transactions details, select the **Settled Date** field for the row. This read-only page allows you to reprint a receipt.

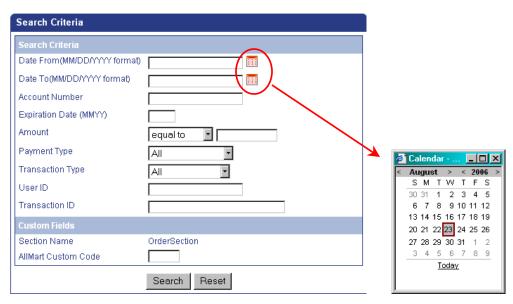
To locate specific information in the previously settled batches, select the **Search** link in title bar above the table.



This option allows you to enter the transaction criteria used to search the transaction history for a date range of settled batches. The search criteria are listed below. If additional fields are identified as required in the Payment Form Field Setup, then these fields will also allow you to search on their content. For example if you have the e-mail address set to "Required", then the e-mail address field also can be used to search the batch contents.

Transaction Search

Enter the transaction search criteria.



- Date From: (MM/DD/YYYY) Enter, or select using the calendar tool, the starting date for the date range of the search.
- Date To: (MM/DD/YYYY) Enter, or select using the calendar tool, the ending date for the date range of the search.
- Account Number Enter the number of the Account used in the transaction.
- Expiration Date Enter the Expiration Date of the Credit Card used in the transaction.
- Amount Select from the drop-down menu to search for a transaction Amount Equal To, Less Than, or Greater than the amount entered.
- Payment Type Enter the Payment Type for the search. Select Credit Card, Debit Card, Food Stamp, Cash Benefit, or Electronic Check
- Transaction Type Enter the Transaction Type for the search. Select Refund, Force, or Sale.
- User ID Enter the User ID used in the transaction.
- Transaction ID Enter the Transaction ID used in the transaction.

Select the **Search** button to initiate the settled transaction search, or select **Reset** to reset the values in the Search Criteria window.

Settled Batch Detail

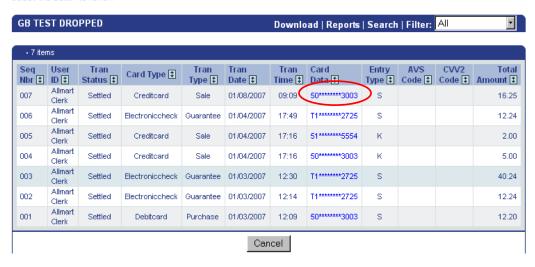
To select an individual batch from the Settled Batch Activity list, select the **Card Data** field for batch row. The individual transactions for the selected batch display on the Batch Detail page. On the upper section of the Settled Batch Details page the **Batch Number**, **Settlement Response**, and **Settlement Time** display. To search the current batch or download the contents of the batch, select the appropriate link on the title bar of the table.

The transactions in the batch can be sorted by each column in the table. The sorting options are:

- Seq Nbr Sort the table by the batch sequence number.
- **User ID** Sort the table by the user who entered the transaction.
- Tran Status Sort the table by transaction status
- Tran Type Sort the table by Sales, Forces, Purchases, Returns, Refunds, or Voids.
- **Tran Date** Sort the table by the transaction Authorization Date.
- Transaction Amount Sort the table by the amount of the transaction.
- Credit Card Number Sort the table by the Credit Card number.

Settled Activity

Select the batch to review



The **Transaction Count** and **Net Amount** values are displayed at the bottom of the transaction list. If the batch has been filtered or a search has been preformed, these values reflect the totals of the current filtering or sort criteria.

The **Display Criteria** section displays the current set of Search or Filtering criteria that has been selected for the batch. This section also will display the name of the current terminal for easy identification. To clear the current filter or search parameters, selects the **Clear Criteria** button. This option will only be displayed if there is a current filter on the batch.

Selecting one of the options in the **Filter** drop-down menu can filter the Batch Details page. The currently selected Filtering criteria will be displayed in the **Display Criteria** section. The filtering options are:

- All All transactions are shown.
- Pended This option filters the batch list for Pended transactions only.
- Unpended This option filters the batch list for Unpended transactions only.
- Review This option filters the batch list for transactions that are set to Review only.
- Purchase This option filters the batch list for Purchase transactions only.
- Sale This option filters the batch list for Sale transactions only.
- Return This option filters the batch list for Return transactions only.

- Force This option filters the batch list for Force transactions only.
- Force Purchase This option filters the batch list for Force Purchase transactions only.
- Force Return This option filters the batch list for Force Return transactions only.
- **Void** This option filters the batch list for Void transactions only.
- Reversal This option filters the batch list for Reversal transactions only.

The **Display** option allows you to change the number of transactions viewed per page. The default value is set to **25**, but the number can be adjusted to display **25**, **50**, **75**, **100**, **250**, **500**, **750**, or **All** records.

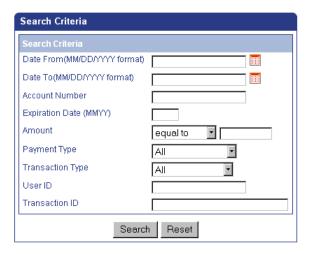


If there are more transactions than the current view can display, page count and navigation buttons display in the title bar above the table. You can select buttons for a specific page , select the next or previous page buttons
buttons
note that the current view can display, page count and navigation buttons display in the title bar above the table. You can select buttons for a specific page
note that the next or previous page
note that the current view can display, page count and navigation buttons display in the title bar above the table. You can select buttons for a specific page
note that the next or previous page
note that the current view can display, page count and navigation buttons display in the title bar above the table. You can select buttons for a specific page
note that the next or previous page
note that the next or previous

Selecting the **Search** option once you have chosen a specific batch allows you to enter specific criteria to locate specific transaction(s) within the selected batch. The search criteria are listed below. If additional fields are identified as "Required" in the **Payment Form Field Setup**, then these fields also will allow you to search on their content. For example if you have the e-mail address set to "Required", then the e-mail address field will be displayed in the **Search Criteria** form and can be used to search the batch contents.

Transaction Search

Enter the transaction search criteria.



• **Date From: (MM-DD-YY)** – Enter, or select the date using the calendar tool, the **Beginning Date** for the search.



- Date To: (MM-DD-YY) Enter, or select the date using the calendar tool, the End Date for the search.
- Account Number Enter the number of the Account used in the transaction.
- Expiration Date Enter the Expiration Date of the Credit Card used in the transaction.

- Amount Search for a transaction Amount Equal To, Less Than, or Greater than the amount entered.
- Transaction Type Enter the Transaction Type for the search. Select Refund, Force, or Sale.
- User ID Enter the User ID used in the transaction.
- Transaction ID Enter the Transaction ID used in the transaction.

Select the **Search** button initiate the settled transaction search, or select **Reset** to reset the values in the Search Criteria window.

To download the entire contents of the currently selected batch, select the **Download Transactions** link in the upper left section of the Batch Details page. This option will display the options available for the batch download.

Download

Select the desired download format.



Select the field that you would like the transactions to be sorted by selecting from the **Sort On** drop-down menu.

Select the desired file type for the batch download. Choose either **Comma-Delimited** to receive the file with each field separated by a comma (,), or choose **Tab-Delimited** to receive the file with each field separated by a Tab.

To include a text qualifier, select the checkbox.

Select the **Download** button to retrieve the batch download in the selected format. The download file will be displayed in a new browser window.

Settled Batches Gift Card

The Gift Card link on the **Settled Batches** page allows you to view the batch information for Settled Gift Card transactions for the previous 12 months. Select the Settled Date field for a batch to view the details



Settled Transaction Detail Page

Once a transaction link has been selected from the **Settled Batch Details** Page, the contents for the selected transaction display. The first section displays all of the authorization response information obtained when the transaction was originally submitted for authorization. Each additional section defined in the Payment Form Field Setup will be displayed with each field that contains data.

If receipt printing is enabled in the Terminal Configuration section, then the **Reprint** button will display. Select the **Reprint** button to print a duplicate receipt.

Settled Batches Main Response

This is the authorization response information. Note that all fields with an asterisk (**) are required.



To create a Refund transaction from the original transaction, select the **Generate Refund Transaction** button. This option will populate a Virtual Terminal Refund transaction with the information entered on the original transaction. The card number will be masked-out for security purposes and the amount of the Refund transaction cannot be adjusted to an amount greater that the amount of the original Sale transaction.

For settled Electronic Checks you are also given the option to View the check image, Upload the image



APPENDICIES

Appendix A: Response Codes

This section describes the various responses that may be returned by the Virtual Merchant application. The Authorization Response Codes, AVS Response Codes, and CVV2 Response Codes are values that may be returned during a transaction authorization.

Authorization Response Code

This is a list of the values that may be returned during an authorization request.

Authorization Response Codes		
Code	Message	Definition
AA	APPROVAL	Approved
AA	APPROVAL PARTIAL	Approved for a Partial Amount
ND	AMOUNT ERROR	Tran Amount Error
N7	DECLINE CVV2	Do Not Honor
ND	EXPIRED CARD	Expired Card
ND	INVLD TERM ID 1	Invalid Merchant Number
ND	SEQ ERR PLS CALL	Call for Assistance
ND	AMT OVER SVC LMT	Amount is more than established service limit
ND	APPL TYPE ERROR	Call for Assistance
NR	CALL AUTH. CENTER	Refer to Issuer
NR	CALL REF.; 999999	Refer to Issuer
ND	CANNOT CONVERT	Check is ok, but cannot be converted. Do Not Honor
N7	DECLINE CVV2	Declined due to CVV2 mismatch \ failure
ND	DECLINED	Do Not Honor
ND	DECLINED T4	Do Not Honor. Failed negative check, unpaid items
ND	DECLINED-HELP 9999	System Error
ND	DUP CHECK NBR	Duplicate Check Number
ND	INCORRECT PIN	Invalid PIN
ND	INVALID CARD	Invalid Card
ND	INVALID CAVV	Invalid Cardholder Authentication Verification Value
ND	INVALID TERM ID	Invalid Terminal ID
ND	INVLD R/T NBR	Invalid Routing/Transit Number
ND	INVLD TERM ID 2	Invalid SE Number
ND	INVLD VOID DATA	Invalid Data Submitted for Void Transaction
ND	MAX MONTHLY VOL	The maximum monthly volume has been

		reached
ND	MICR ERROR	MICR Read Error
ND	MUST SETTLE MMDD	Must settle, open batch is over 7 days old. Note: Batch will be Auto Settled after 10 days
ND	NETWORK ERROR	General System Error
NC	PICK UP CARD	Pick up card
ND	PLEASE RETRY	Please Retry/ Reenter Transaction
ND	RECORD NOT FOUND	Record not on NOVA Network
ND	REQ. EXCEEDS BAL.	Req. exceeds balance
ND	SERV NOT ALLOWED	Invalid request
ND	TOO MANY CHECKS	Too Many Checks (Over Limit)
AA	APPROVAL	Approved
AA	APPROVAL PARTIAL	Approved for a Partial Amount
ND	AMOUNT ERROR	Tran Amount Error
N7	DECLINE CVV2	Do Not Honor

Electronic Gift Card (EGC) Response Codes

This is a list of the values that may be returned during an EGC authorization request.

	Authorization Response Codes		
Code	Message	Definition	
AA	APPROVAL	Approved	
01	DECLINED-HELP 9999	Host Busy	
07	MAX REACHED	Cannot load the amount specified	
13	DUPLICATE TRAN	Duplicate transaction	
02	INVALID CARD	Invalid Card	
03	INVALID TERM ID	Invalid Terminal ID	
04	AMOUNT ERROR	Tran Amount Error	
05	ALREADY ACTIVE	Card already active	
06	REQ. EXCEEDS BAL.	Request exceeds balance	
08	NON RELOADABLE	The card cannot be reloaded	
09	TRAN NOT ALLOWED	Transaction type not allowed	
10	INVLD TRAN TYPE	Transaction type not on server	
11	EXPIRED CARD	Expired card or bad expiration date	
12	CARD NOT ACTIVE	The Gift Card is not activated	
14	SEQ ERR PLS CALL	Call for Assistance	
15	SEQ ERR PLS CALL	Sequence does not match previous response	
16	INVALID BATCH ID	Batch ID is not on the server	
17	INVALID TENDER	Tender types is not on the server	
99	DECLINED-HELP 9999	General System Error	
ND	SERV NOT ALLOWED	Invalid request	
ND	INVLD TERM ID 1	Invalid Merchant Number	
ND	SEQ ERR PLS CALL	Call for Assistance	
ND	APPL TYPE ERROR	Call for Assistance	
AA	APPROVAL	Approved	

AVS Response Codes

An **AVS Response Code** will be returned in Authorization Response Message when AVS information is present in the transaction authorization request.

	AVS Response Codes
Code	Definition
Α	Address matches - Zip Code does not match.
В	Street address match, Postal code in wrong format. (International issuer)
С	Street address and postal code in wrong formats
D	Street address and postal code match (international issuer)
E	AVS Error
G	Service not supported by non-US issuer
I	Address information not verified by international issuer.
M	Street Address and Postal code match (international issuer)
N	No Match on Address (Street) or Zip
0	No Response sent
Р	Postal codes match, Street address not verified due to incompatible
R	Retry, System unavailable or Timed out
S	Service not supported by issuer
U	Address information is unavailable
W	9-digit Zip matches, Address (Street) does not match.
X	Exact AVS Match
Υ	Address (Street) and 5-digit Zip match.
Z	5-digit Zip matches, Address (Street) does not match.

CVV2 Response Codes

The **CVV2 Response Codes** are returned in Authorization Response Message when the CVV2 data is present in the transaction authorization request.

CVV2 Response Codes		
Code	Definition	
M	CVV2 Match	
N	CVV2 No match	
Р	Not Processed	
S	Issuer indicates that CVV2 data should be present on the card, but the merchant has indicated that the CVV2 data is not resent on the card	
U	Issuer has not certified for CVV2 or Issuer has not provided Visa with the CVV2 encryption Keys.	

Settlement Response Codes

The **Settlement Response Code** is returned when a settlement is preformed, either manually, or through the Auto Settlement process.

CVV2 Response Codes		
Response	Description	
GBOK BBBMMDDHHMM	GB = good batch, settlement received OK BBB = batch number 001 through 999 MMDD = month and day of settlement HHMM = Time of settlement	
INVALID TERM ID	Terminal ID is not on file with the NOVA Network	
INVLD CARD 9999	Card type, specified by item number, not authorized for settlement	
INVLD DATA 9999	Invalid transaction amount	
PLEASE RETRY 9999	System failure - please attempt again	
RB INV ACCT 9999	Record specified by item number is invalid	
RBOUT OF BALANCE	Item and dollar totals do not match the settlement trailer record totals	
RB INVLD AMT 9999	Invalid transaction amount	
SERV NOT ALLOWED	Merchant not set up for settlement processing	
UNREC CARD 9999	Card type, specified by item number, is not recognized	

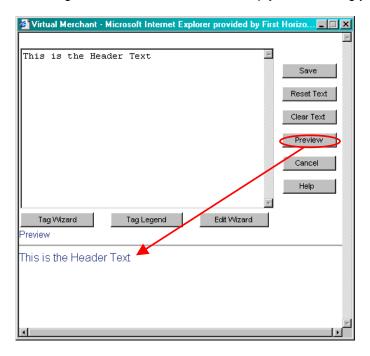
Appendix B: Text Editor

Text Editor

To use the **Text Editor**, select the **Editor** in the Header Footer section on the **Payment Form** page.



The **Text Editor** allows you to enter the text to display in your Header and Footer fields. You can either type in your desired text and save, utilizing the default, Arial font that will appear in a 10-point size. There are four buttons on the right side of the text editor that help you in creating your headers and footers.



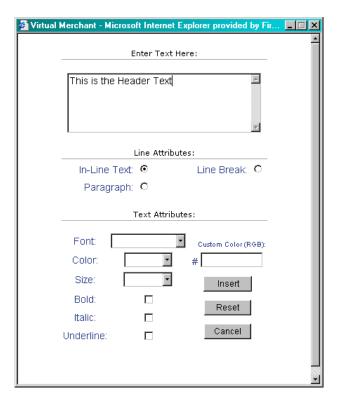
- Save The Save button saves the text you have entered into the Text Editor window.
- Reset Text The Reset Text button will remove all unsaved text from the Text Editor window.
- Clear Text The Clear Text button will remove all text from the Text Editor window. If you do not save
 before clearing the text, the last message you saved will appear in your headers and footers.
- Preview Selecting the Preview button allows you to preview your text, as it will appear in the header and/or footer in the Preview window at the bottom of the tool. Selecting the Preview option will retain the text in the Text Editor window, but the tool will remain open until you Save or Cancel the work. To save your Header and/or Footer text to your site, you must select the Save button.
- Cancel Selecting the Cancel button will close the Text Editor, canceling and deleting unsaved work.
- **Help** This button will display the help page for the Text Editor.

There are three buttons in the middle of the **Text Editor** that allow you to easily customize your headers and footers. The buttons are:

- Tag Wizard This option is used to define the propertied for the selected text.
- Tag Legend This option explains the functions with examples for tags utilized by the Tag Wizard.
- Edit Wizard This option displays each saved line of text separately for editing or deletion.

Tag Wizard

This option is used to define the properties for text in either the header or footer messages. This wizard utility is divided into three sections. The **Enter Text Here** section is used to enter the basic text to add to the header of footer. The **Line Attributes** section is used to define how the text entered into the previous box should appear on the form. The **Text Attributes** section is used to define the display properties of the text.



Enter Text Here

The **Enter Text Here** field is the section where the text should be entered to appear on the Headers and Footers.

Line Attributes

The **Line Attributes** field allows you to decide the placement of the text you have entered. There are three selections from which to choose:

- In-Line Text This option will place all of the text in one continuous line.
- Line Break Selecting the Line Break option will automatically wrap your text over to the next line. Using the Line Break option with saved text will begin the text on a new line.
- Paragraph Selecting the Paragraph option will automatically wrap your text to the next line. When using the Paragraph option to add new text to existing text, the new text will begin where the existing text ends and will continue to wrap to the next line. The Paragraph option allows you to select the desired alignment of the text in the previous section. After selecting an alignment, all subsequent text will appear in this alignment unless you once again select the paragraph option and change the alignment. The alignment options are:
 - Left (default alignment)
 - Center
 - Right

Text Attributes

The **Text Attributes** field allows you to modify the font size, color and format of your text.

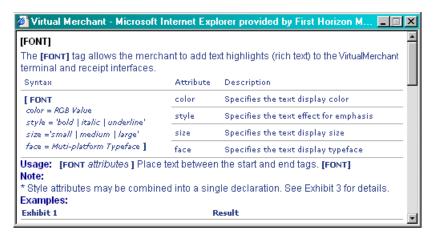
- Font This drop menu allows you to choose one of six different fonts.
 - Arial (default)
 - Courier
 - Helvetica
 - Times
 - Times New Roman
 - Verdana
- Color This drop menu allows you to select one of 16 colors to better match the look and feel of your own site. The Custom Color RGB window allows you to enter the exact RGB code of your Website's color if the desired color does not appear in the 16-color palette. The basic palette colors are:
 - Aqua
 - Black
 - Blue
 - Fuchsia
 - Gray
 - Green
 - Lime
 - Maroon
 - Navy
 - Olive
 - Purple
 - Red
 - Silver
 - Teal
 - White
 - Yellow
- Size This drop menu allows you to select one of three font sizes.
 - Small (10-point, default)
 - Medium (14-point)
 - Large (18-point)
- Bold Selecting this option will make your selected text appear in a bold font.
- Italic Selecting this option will make your selected text appear in a bold font.
- Underline Selecting this option will make your selected text appear underlined.

Select the **Insert** button to insert the modified text into the Text Editor. Select the **Reset** button to remove all textual changes from the Text Wizard tool, keeping the tool open to continue work.

Selecting Cancel will abandon all text modifications and will close the Text Wizard.

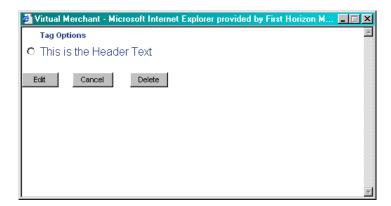
Tag Legend

The Tag Legend explains the functions with examples for use of several tags utilized by the Tag Wizard.



Edit Wizard

The **Edit Wizard** displays each saved line of text separately for editing or deletion. To edit the text, select the radio button to the left of the line you with to modify and select the **Edit** button at the bottom of the Edit Wizard tool. This will open the **Tag Wizard** and allow you to modify the selected text.



Selecting a radio button beside a line of text and then selecting the **Delete** button at the bottom of the **Edit Wizard** tool will permanently delete the selected text. Select the **Cancel** button to close the Edit Wizard window without changing or deleting the text.

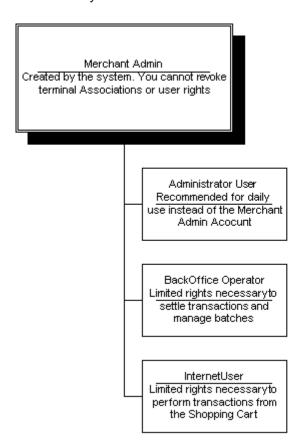
Appendix C: Merchant User Administration Strategies

User Administration Scenarios

In the simplest case, you may be the only employee of your company. In this case, you would log into Virtual Merchant as the Merchant Administrator and use the Virtual Merchant Account ID as your User ID. No further user administration is necessary on your part. Many companies will be more complex than this.

Example: Small Internet "buy-button" business

As an example, assume that you own a company that sells things on a Website. You have an accountant who may submit transactions and also will settle the transactions and download settled batches for importing to spreadsheets. You want to set yourself up as the administrator of everything related to Virtual Merchant. The user hierarchy in this case would be as follows:

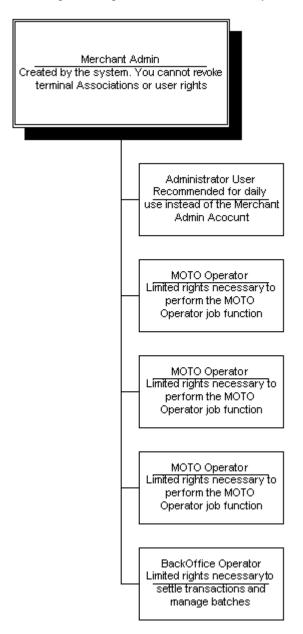


First, login to the Virtual Merchant account as the Merchant Admin and create your own account, giving yourself all rights and associating yourself with the Internet Terminal. Then log in as yourself and create the other users. The Website user needs to be associated with the Internet Terminal and have the rights to perform commerce transactions. The user for the account has all the Transactions rights, plus the Batches - View, Batches – Void/Delete, Batches – Settle and the Batches - View Settled History rights. Another important configuration not related to User Management is that the Internet Terminal must be marked with the Enable HTTP Transaction parameter checked on the Advanced System Configuration page of Terminal Setup.

Example: Several MO/TO operators

Assume, instead that you own a company with several MO/TO operators and an accountant. The MO/TO operators submit all types of transactions, mostly Sales, but occasionally Forces, and (to perform Customer Service functions) Credits. The accountant may submit transactions and also will settle the transactions and download settled batches for importing to her spreadsheets. You want to set yourself up as the administrator of everything related to Virtual Merchant.

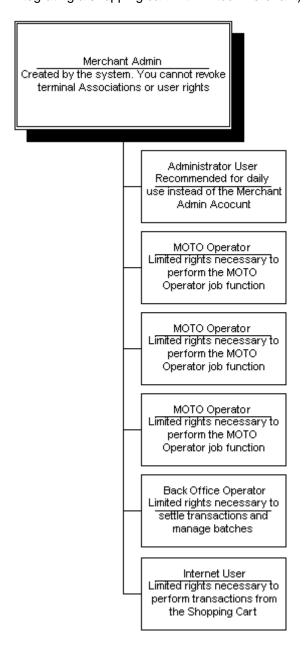
Following is a diagram of the User hierarchy that might be set up for your company:



First, login to the Virtual Merchant account as the Merchant Admin and create your own account, giving yourself all rights and associating yourself with the MO/TO Terminal. Then log in as yourself and create the other users. Each of the MO/TO operators has the Transactions – Sale, Transactions – Credit and Transactions – Force user rights and nothing else. The user for the account has all the Transactions rights, plus the Batches - View, Batches – Void/Delete, Batches – Settle and the Batches - View Settled History rights. Later as your accountant learns more about how Virtual Merchant works, you may give them the Edit Terminal Setup right as well.

If you were to add a Website, you would call NOVA Merchant Support and add an Internet Terminal to your account. Then you would log in as the Merchant Admin and gives yourself the Terminal association for the

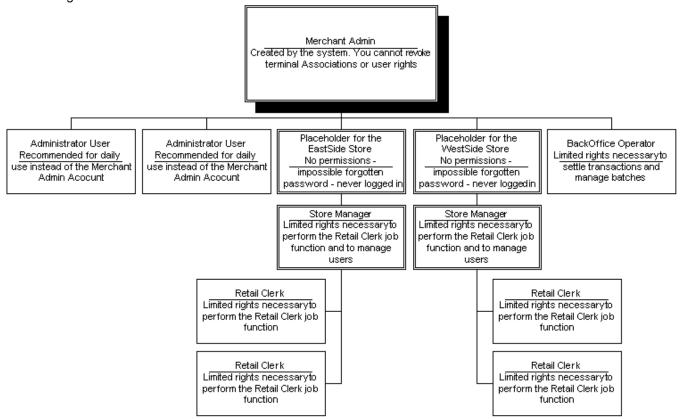
Internet Terminal. Next, logged in as yourself, add a user named something like "Website" for use by the Web developers in integrating the shopping cart with Virtual Merchant (See the Developer's Guide for details on integrating a shopping cart with Virtual Merchant). The resulting user hierarchy follows:



The new Website user needs to be associated with the Internet Terminal and have the Transactions – Sale user right only. You also would add the Terminal association for the Internet terminal to your accountant's user account so that they can manage batches for both Terminals. Another important configuration is that the Internet Terminal must be marked with the Enable HTTP Transaction parameter checked on the Advanced System Configuration page of Terminal Setup.

Example: Multiple Retail Stores

George Widget owns a company selling his famous product in two retail stores. He employs a store manager and a couple of retail clerks in each store and encourages friendly competition between the stores. He also employs an IT manager and an accountant. NOVA Merchant Support has configured a separate Retail Terminal ID for each of his stores. He expects his store managers to manage the users for each of their stores, but doesn't want either of them getting into the other's business. Just to make sure, he also wants his IT manager to be able to manage all of the users in his company. George wants only the accountant and himself to perform settlements and manage batches.



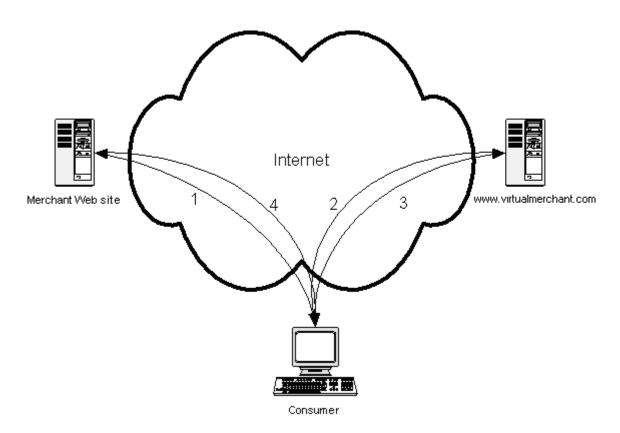
First, George would login to Virtual Merchant as the Merchant Admin and create users for himself and the IT manager. These users are associated with all terminals and have all user rights. Then he has the IT manager login and create the other users.

If the East Side store manager and the West Side store manager were peers of each other, then they would be able to manage each other's users. To be sure that they aren't peers of each other, the IT manager creates two dummy accounts, one for each store. These accounts have no user rights and are associated with no terminals. These accounts should have impossible passwords. These accounts are marked inactive. They are never intended to be used; they are only there as placeholders in the hierarchy.

The IT manager then creates users for the two store managers. Each is associated only with the Terminal for that store. The store managers have the Transactions – Sale, Transactions – Credit and Transactions – Force user rights, plus the Create Subordinates, Find/Edit User Information, Edit User Rights and Edit Terminal Associations rights. Later, while instructing the store managers on how to do this new job function, The IT manager walks them through creating the clerks' accounts. The clerks have only the Transactions – Sale, Transactions – Credit and Transactions – Force user rights and are associated only with the Terminal for that store. The store managers don't even see the other store's Terminal as an option when assigning Terminal Associations to the clerks.

Finally, The IT manager creates a user for the accountant. This user has all the Transactions rights, plus the Batches - View, Batches - Void/Delete, Batches - Settle and Batches - View Settled History rights. The accountant user is associated with both Terminals.

Appendix D: Virtual Merchant Receipt Form Link Definition



Step 1. The Consumer shops at the Merchant Website and gets the checkout page from the shopping cart. The action on the checkout form instructs the consumer's browser to submit the information to https://www.virtualmerchant.com/VirtualMerchant/process.do

Step 2. The consumer submits information to https://www.virtualmerchant.com/VirtualMerchant/process.do, and Virtual Merchant validates the data. The form that the consumer fills out prior to the final authorization is the "Payment form". The payment form can be customized to:

- 1) have colors that match the merchant Website,
- 2) have a top-left logo image to match the merchant Website,
- 3) have a background image to match the merchant Website,
- 4) have text at the header and footer to either match the merchant Website or give the merchant more instructions.

The action on the payment form also instructs the consumer's browser to submit the information to https://www.virtualmerchant.com/VirtualMerchant/process.do.

Step 3. Depending on the selected Receipt link method and whether the transaction was approved or declined, Virtual Merchant displays a receipt. The receipt can be customized in all the same ways that the payment form can be customized. In the case of the Hyperlink, the Form Get and the Form Post, there is a way for the consumer to optionally return to the Merchant's site. Form Get and Form Post will pass information to the merchant's site in addition to directing the consumer there. In the case of Get Redirect, no receipt page is displayed by Virtual Merchant, and the consumer's browser is instructed to automatically redirect to a page on the merchant's Website (usually a receipt page). Information is passed to the merchant's receipt page in this case as well.

Step 4. Depending on the selected Receipt link method and possibly on the consumer's action, the consumer returns to the merchant's Website.

Address Verification

The process of verifying customer addresses with the issuing bank to minimize fraudulent transactions.

Authorization

The process of having Credit Card transactions approved by the issuing bank through communication with the NOVA Network.

Auto-Pend Transaction

A transaction option that automatically "Pends" Sale transactions submitted through the Virtual Merchant payment form.

Auto-Settle

An option that automatically settles all "unpended" transactions in the Unsettled Transaction batch at a specified time each day.

Card Verification Value

The process of verifying the Card Verification Value with the issuing bank to minimize fraudulent transactions. The CVV2 value is a three of four digit value that is printed in reverse italics on the back side of the card. This additional value is not embossed upon the front of the card, nor is it contained upon the magnetic stripe on back.

Comma-Separated Value

A text file format in which all data elements within the file are separated by a comma. This format is also referred to as a comma delimited file.

Filter

A function that allows you to enter specific parameters to narrow a search for transaction information in a particular file. You can search for a specific card number, within a specific date range, etc.

Force Transaction

A previously authorized transaction that needs to be entered in the current batch.

GBOK Number

A successful settlement batch with the NOVA Network.

Merchant Admin

The default user account for the Virtual Merchant account; the **Merchant Admin User ID** is the same as the **Virtual Merchant Account ID**. This special user cannot be deleted, always has all user rights and all terminal associations.

Peer User

A user who shares the same supervisor as you.

Pend Transaction

A transaction status option that will not allow the transaction to be submitted for settlement. To change the status of the transaction to allow it to be submitted for settlement, it must be "**Unpended**".

Refund Transaction

A transaction used to refund a previous purchase.

Sale Transaction

A transaction in which an authorization is obtained and the transaction is entered into the unsettled batch.

Scope of user rights

Virtual Terminal and Terminal Setup rights apply to your ability to do things in the context of any terminal in your Terminal Associations list. User Management rights apply to your ability to do things to your subordinates and to your peers' subordinates. If you have the Edit Terminal Associations right, you may only add terminal associations that you, yourself have.

Settlement Process

The process of sending a batch of previously authorized transactions for settlement to the NOVA Network

Subordinate

This is anyone who is directly below you in the user hierarchy, or any of their subordinates.

Supervisor

This is the person directly above you in the user hierarchy.

Tab-Delimited Value

A text file format in which all data elements within the file are separated by the Tab character.

Terminal Association

Where your user rights refer to something you can do involving a terminal (make a sale or settle a transaction), your user must be associated with that terminal and you must have selected that terminal context in Virtual Merchant. See the chapter on User Management for details on how to make or edit **Terminal Associations**.

Terminal Friendly Name

Terminals are referred to in Virtual Merchant by a **Friendly Name** configured by NOVA's Internet Product Support, for instance, "Website Terminal."

Terminal ID

A number used to identify the source of a transaction to the NOVA Network. This corresponds to a physical Credit Card terminal in a traditional POS solution, but for Virtual Merchant, this is a virtual ID. You may have more than one terminal for use within your Virtual Merchant account. Each **Terminal ID** (**TID**) is associated with certain features as dictated by your NOVA merchant agreement. "Merchant Information" in Terminal Setup can be different for each terminal so that, for instance, the address printed on a receipt is correct for that location. See the chapter on Terminal Setup for details on configuring your terminal.

Unpend Transaction

A transaction status option that allows the transaction to be submitted for settlement. To prohibit the transaction from being submitted for settlement, it must be "**Pended**".

User Account

The user you use to sign in to Virtual Merchant; the User ID is case sensitive

User Rights

The tasks that your **User Account** can do in Virtual Merchant; there are three areas of **User Rights**: Virtual Terminal, User Management and Terminal Setup. See the section on User Management for details on how to make or edit **User Rights**

Virtual Merchant Account

The Virtual Merchant Account your company has with the NOVA Network.

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